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ABSTRACT

Project Africa's report summarizes: 1) its background and rationale, structure, and staff, 2) curriculum materials design, development, field trial and evaluation, 3) other project dissemination activities. Three different groups of materials were developed by the project. The most comprehensive was a flexible, sixteen-week program of study, "Africa South of the Sahara: An Inquiry Program for Grades 7-10" (ED 030 010, ED 032 324-032 327, ED 038 545). The second group consisted of resource units and associated materials for use in twelfth grade courses (ED 023 692, ED 037 586, ED 038 546, ED 039 260, ED 040 912). Finally, a prototype programed text on the "Geography of Africa" was published (ED 033 249). All materials are based on research into existing student knowledge (ED 023 693), existing materials, and suggestions of experts. These materials are multidisciplinary in approach for use with an inquiry-teaching stretegy, can be used by students of average ability, and by teachers untrained either in African studies or in inquiry-teaching. Dissemination activities included a model of a useful inservice teacher training program. Conclusions and recommendations concerning the effectiveness of the project are discussed. (SBE)

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FINAL REPORT

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Project Africa was a social studies curriculum research and development project of modest proportions. Nevertheless, it involved the contributions of over one hundred experienced classroom teachers, specialists in African studies, and specialists in curriculum, instruction, learning, evaluation and media as well as more than four thousand secondary school students throughout the United States. Whatever contributions this project may have made toward improved instruction about Africa south of the Sahara in our schools are the results of the combined efforts of all these people.

Yet, Project Africa would not have come into existence and could not have conducted its research without the special concern and assistance of a number of educators. To these people go our most sincere thanks for the contributions they made to Project Africa--to Dean William Fullager of the College of Education of The University of Rochester, to Arliss Roaden, Associate Dean of the College of Education of The Ohio State University and to Dean Erwin Steinberg, Professor Irving Bartlett and Professor Edwin Fenton of the College of Humanities and Social Sciences of Carnegie-Mellon University.

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To all of these educators and to everyone else who contributed to Project Africa goes the credit for making this Project whatever success it was. We enjoyed working with them all--they taught us much. We only hope that the results of their work will now find a useful place in the classrooms of our schools and that the research in which we all have engaged these past forty months will not prove fruitless.

June 30, 1970

Barry K. Beyer
E. Perry Hicks

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PROJECT AFRICA - A SUMMARY

Project Africa was a social studies curriculum research and development project designed to develop and test new instructional materials, teaching guides, and content units for use in teaching about the history and culture of Africa south of the Sahara in selected grades of American secondary schools. This project began its program of developmental research on March 1, 1967 and concluded its work June 30, 1970. Copies of all research and technical reports and of all other materials developed and/or tested by the project are available through the ERIC Document Reproduction Service.

This project was a cooperative endeavor of many specialists. It involved the expertise of scholars in African studies, experienced classroom teachers, specialists in curriculum, teaching, media and evaluation and students themselves. Materials development generally involved preliminary design sessions each spring, summer research workshops involving up to eight experienced teachers and additional consultants, editing and preparing materials each fall and classroom field trials the following spring. Certain basic or developmental research, however, cut across this cycle and continued for the duration of the project.

Project Africa's major efforts were devoted to the design and evaluation of instructional materials on Africa south of the Sahara for use with an inquiry-teaching strategy. These materials reflect the best scholarship, are multidisciplinary in approach and include a wide variety of audio, visual and written media. They can be used by students of average ability and by teachers untrained either in African studies or in inquiry-teaching. Some of these materials are designed for use in social studies courses in grades 7-10 and others for use as resources in twelfth grade courses of study. All materials are based on research into existing student knowledge, already existing materials and suggestions of experts as to what and how students should study about Africa.

The project materials integrated into an inquiry program of study for use in grades 7-10 were extensively evaluated during spring 1969. Four African specialists evaluated the content. Twenty-two experienced classroom teachers used the materials as directed in their classes for a period of sixteen weeks. African specialists, teachers and students submitted evaluation reports on various aspects of the program. A battery of pre- and posttests was administered to the experimental classes and matched control groups to measure cognitive and affective outcomes.

While certain substantive errors were detected by the African specialists, these were of a relatively minor nature and easily correctable. The substance of the program was found to be generally

accurate and representative of the best scholarship. Classroom trials found that teachers inexperienced in inquiry-teaching could use these materials satisfactorally. Both students and teachers enjoyed the program initially although sixteen weeks of inquiry about Africa left their enthusiasm somewhat diminished by June. Experimental groups showed significant increases in knowledge about three of four content areas and for two of these areas the increases were significantly greater than those of control groups that studied regular school curricula on Africa. However, there were no significant differences in affective outcomes or in skills of inquiry between the students in the experimental and control groups, as measured on project evaluation instruments.

Classroom evaluation of these project materials thus suggests that these materials do work in actual classroom situations and that their use as prescribed does lead to significant increases in knowledge about Africa south of the Sahara. It also suggests that inquiry teaching will work well with average ability students and can be used by teachers untrained in its nuances. Furthermore, this research further substantiates other findings that teacher attitudes sharply affect student attitudes about what they study. If the study of Africa south of the Sahara is to change student attitudes significantly, then it can only be done by convincing teachers this study is worthwhile and enjoyable.

Project Africa also engaged in dissemination activities of two kinds--activities that were primarily informational in intent and activities that were primarily of a teacher-training nature. A model of a useful in-service teacher-training program on Africa south of the Sahara was utilized in these latter activities. Numerous project publications were designed to communicate to educators the research findings and the materials developed.

This project did accomplish its major objectives, although because of reductions in funding and other reasons not all were accomplished in as complete a form as possible. The basic research that was undertaken and the large number of instructional materials developed are available to interested educators and will be most useful in their classrooms. Moreover, the work of the project suggests a number of implications for future research and development in the area of African studies, for flexibility in the use of funds for such research, for training curriculum materials developers in the areas of inquiry-teaching and African studies and for research to identify the attributes of good materials developers. Its work pointed up a need for further evaluation of the long range impact of the use of inquiry programs and of the effects of such programs on cognitive and affective achievement of black students. Project Africa's work also has implications for other social studies curriculum development projects that may be organized in the future, implications in the areas of rationale, staffing, use of funds, areas of concentration, and relations to teacher training.

I

PROJECT AFRICA - BACKGROUND AND RATIONALE

Early in the 1960's social studies education in American schools began to undergo a number of changes. Three of these changes are most striking. One area of change involved what was being studied in the typical social studies classroom. Shortly after 1960 educators began to pay increased attention to bodies of content until then largely ignored in the typical social studies curriculum. Among these new bodies of content was the "non-western" world.

A second change involved the types of learning outcomes urged for the social studies classroom--conceptual knowledge, intellectual skills and attitudes and values began to replace fact-memorization as major instructional objectives. Finally, changes in teaching strategies were introduced. Serious attempts were launched to design and implement teaching-learning strategies built around the idea of inquiry. Project Africa represented an attempt to bring together these three major types of curricular change and to focus them on one specific area of social studies education--on the study of Africa south of the Sahara in American secondary schools.

The primary purpose of Project Africa was to improve learning about sub-Saharan Africa at selected grade levels in our secondary schools. This Project was conceived and proposed to the Bureau of Cooperative Research of the United States Office of Education in 1965, approved for support by that Bureau in mid-1966 and funded early in 1967. Operations began in March 1967 at The Ohio State University but moved to Carnegie-Mellon University in Pittsburgh, Pennsylvania in September 1968 when Project Director Dr. Barry K. Beyer joined the history faculty of that institution. Project Africa completed its USOE-sponsored research on June 30, 1970. This report is a summary and evaluation of the forty-months work of this project.

Background of the Project

Project Africa's origins lay in the needs of American secondary school classrooms as perceived in 1965 as well as in the social studies curriculum and "non-western" studies movements of the early 1960's. By 1965, the necessity of improving student learning--and thus classroom instruction--about Africa south of the Sahara was a matter of national concern. Yet efforts toward improvement were, at best, narrowly local and, at worst, extremely superficial and ethnocentric. While a few ambitious school systems or state education departments were engaged in some efforts at self-improvement, these institutions generally lacked the resources needed for a constructive impact on teaching about Africa within their own schools to say nothing of those beyond the confines of their immediate constituencies.

Although over 80% of America's secondary schools in 1965 made provision for some type of study about Africa south of the Sahara some place in the curriculum, this study suffered from three basic shortcomings: the vast majority of teachers directing this study were notoriously unprepared and/or misinformed about this region, its peoples and their life styles; instructional materials on Africa were conspicuous by their sparse numbers, poor quality, outdated content, and limited nature; and there was virtually no communication between African specialists, Africans, educationists and classroom teachers directed toward improving classroom instruction about Africa south of the Sahara. When a number of state education departments moved to increase drastically the amount of time and depth to be devoted in their schools to the study of this region and its peoples, these shortcomings were sharply accented. What was needed was some type of curriculum improvement project to remedy these shortcomings on a national level. Since there already existed several such projects of a national scope dealing with other areas of the "non-western" world, including Asia and Latin American, creation of a similar nationally-supported project on Africa south of the Sahara seemed quite possible and desirable.

Thus Project Africa came into being. This project was a curriculum improvement effort designed to improve a specific aspect of social studies learning--Africa south of the Sahara, a subject of study in our schools then much in need of improvement. But Project Africa was by no means a massive, all-inclusive effort to remedy all the deficiencies that existed in the study of this subject in American schools. This project, rather, was decidedly limited in its objectives and emphasis. Project Africa dealt only with content about a part of Africa instead of the continent as a whole. It focused only on secondary grades, grades seven through twelve. It concentrated primarily on materials development rather than on the production of course outlines or on training teachers. It was concerned about developing conceptual knowledge, not memorization of facts and statistics. And finally, it elected to structure its materials around inquiry strategies of teaching rather than around more traditional expository approaches to instruction. By thus limiting its focus, Project Africa hoped to generate the most widespread and immediate improvements possible in classroom learning about Africa south of the Sahara.

Project Africa Rationale

Project Africa's research and development activities were based on five basic decisions--decisions to focus on:

1) Africa <u>south</u> of the Sahara;
2) <u>Secondary</u> social studies courses;
3) <u>Materials</u> design and development;
4) <u>Conceptual</u> learning objectives; and
5) <u>Inquiry-teaching</u> strategies.

Reasons for these decisions constitute the underlying rationale for Project Africa.

Why Africa south of the Sahara? Why not the entire African continent? The decision to focus on part of Africa rather than on the entire continent as a whole grew out of the realities of the American educational system as well as out of the state of current scholarship and the needs of American society.

Africa south of the Sahara was, in 1965, studied as a unique body of content in most American secondary schools. The world has been traditionally divided by educators into a number of different regions for purposes of classroom study in geography, history, and world cultures courses, and Africa south of the Sahara was one of these regions. It was also one of the most poorly taught of these regions. If any immediate improvement in the teaching of this region was to be made, it seemed most wise that it should be done within the context of existing approaches rather than by creating entirely new structures and trying to persuade school districts to adopt these.

Africa south of the Sahara is obviously a designation of convenience rather than a precise geographical or cultural area. Certainly it is true that Africa does exist as a single, continental land mass. It is true that the peoples and lands north of the Sahara and those south of the Sahara have a history of economic and cultural interchange going back at least five millenia and that, despite the formidable barrier of this desert, the links between them have never been severed.

But Africa is too big to be understood with any degree of accuracy by a continent-wide survey. Such a survey, especially in the brief time available for it at the secondary level, in fact, tends to obscure rather than facilitate meaningful insights about African lands and peoples. It is precisely surveys such as this that have led to the erroneous stereotypes and misconceptions which typify what most Americans believe about this region today. Given the great territorial extent, numerous cultural groups and other diverse conditions of this land mass, meaningful limits must be assumed. One such limit is the immense Sahara Desert as it stretches across the breadth of this continent.

To the north lie a tier of states predominantly Arab and Berber in population, culture and affiliation. In modern times their links with other Arab states in the Middle East have proved stronger than those they possess with the states of Black Africa, history and pan-Africanism notwithstanding. They have always been part of a non-African world--Phoenician, Greek, Roman, Arab, Turkish--in a sense that no sub-Saharan area has ever been, at least until the modern era. It is, indeed, virtually impossible to study or understand the history and culture of northern Africa in isolation from the parallel

history and culture of the Middle East and the lands of the Mediterranean basin.

To the south of the Sahara are states which must be regarded as different culturally, ethnographically, and in their historical experience from those of the north. Sub-Saharan Africa is obviously no clear-cut culture unit. Yet it does possess two clearly definable traditions which mark it off not only from northern Africa but from the rest of the world as well. Black Africa is an amalgam of hundreds of more or less diverse peoples living between the Sudan and the southern tip of the continent. These peoples possess their own languages, political and social organization, and life styles, but they are all Black Africans and, as such, distinct. White Africa, the European settler region of the south and center, is also clearly different from those parts of the continent inhabited by indigenous peoples and, for that matter, from anywhere else in the world. Together these comprise a region that is unique. If American students are to understand the African continent as a whole and, indeed, the peoples of the entire world, they must first come to understand this region south of the Sahara and its inhabitants.

Africa south of the Sahara certainly has long been considered a viable region for purposes of classroom study. That it is a region particularly worthy of study in American schools today is underscored by several additional factors. A person named Maloney is quite likely to be inextricably associated in the American public mind with the Blarney Stone, the color green and whiskey! A person named Graziano is almost certainly wedded to spaghetti, pizza and the Italian "boot." A person named Gonzales is customarily associated with tacos, tortillas, and tamalés. And black Americans are inescapably wedded to Africa south of the Sahara. How white Americans see blacks and, indeed, how blacks see themselves is conditioned to a large extent by how they both see that part of Africa lying south of the Sahara. As long as most Americans see this land in terms of the "Tarzan" image--as they do--they are likely to view blacks, wherever they live, as little better than naked, dart-blowing, cannibalistic savages. And they will act or react accordingly.

That the vast majority of Americans do have grossly distorted images of Africa south of the Sahara is beyond dispute. Popular knowledge about this region and its peoples is hardly better than a mixture of myth, erroneous stereotypes and gross misimpressions. Yet political, social, economic and other decisions are made at all levels of our society on the basis of these inaccuracies, half-truths, and fantasies. Continued existence in this rapidly changing world requires that decisions which may affect our own future as a nation of diverse peoples must be based on the most accurate knowledge.

An up-to-date, in-depth study of Africa south of the Sahara will not only help future citizens secure an accurate picture of this part of their contemporary world, but will also help them develop an understanding of black peoples everywhere as human beings who, like all

human beings, have a long past and high aspirations in a changing world, who create things, express themselves in a wide variety of ways and grapple with the same basic problems that bother all other kinds of people in the world. Such a study may lead to insights that enable us to see ourselves--whites as well as blacks--as others see us, to understand ourselves better in relation to other people in our own society and to other societies as well. And, at the same time, the study of Africa south of the Sahara may also serve as a medium through which can be examined problems similar to ours but which, for a variety of reasons, are closed to dispassionate, rational analysis and study.

Thus it is that Africa south of the Sahara was considered, in 1965, and still today, as not only a historically, geographically and culturally viable region for purposes of classroom study, but moreover a region most worthy and even demanding of study in our schools. Indeed, if any immediate contribution toward improved learning about Africa and ourselves was to be made at all, it seemed wise to work within the limitations of the social studies curriculum as it already existed rather than to design a totally new structure which may or may not win later acceptance by a majority of schools.

Why secondary school grades? Why not the entire educational curriculum?

Although study of Africa may be found scattered at various places throughout our elementary, secondary and college curricula, it is most typically a required study only in secondary school social studies courses--as part of world geography or "non-western" studies surveys offered in seventh, eighth or ninth grades or in world (European) history or area studies courses offered at tenth and eleventh grade levels. Virtually all secondary school students--whether they are academically slow, average or fast--were and still are--required to take at least one of these courses. Students could not avoid them and teachers could not avoid teaching them, even if they were unprepared to do so.

The study of this region in grades 7-10 in 1965, regardless of the title of the course in which it was found, usually followed a common pattern. It was introduced with a geographical survey followed by quick surveys of the people, economy, government, culture, history and current problems. The traditional world (European) history course usually touched on Africa south of the Sahara only when it figured in European history, which customarily was during the "Age of Exploration," the "Partition of Africa," and the problems associated with twentieth century nation-building. In general, the content selected for study in all of these courses or events was basically descriptive and emphasized things rather than people. In most instances, too, its acquisition represented the principal goal of the learning experience. There was little doubt in 1965 but that if learning about Africa south of the Sahara was to be improved, initial at-

tention should be devoted to those grades in which it was already established as a subject of study.

There was another factor to be considered here, too--the students themselves. Many students who take courses in which this region is studied are not in these courses because they elect to be there; their attendance is required. Furthermore, many of these students are of average or below-average academic ability. This is especially true in most world geography courses which are customarily required of the "slower" students while the college-bound are channelled into European history instead.

Moreover, most students (and especially the "slow" and average ability students) are rarely intellectually involved in these courses. Learning in secondary school geography courses often consists almost solely of coloring maps, outlining boundaries and memorizing capital cities, major products and the names of famous people. Learning in many other social studies courses consists largely of memorizing what teacher or text asserts is meaningful, significant, true or just to be learned! There seems to be little purpose in these courses beyond that of mastering the facts. Consequently most social studies classroom learning is rote and retained barely beyond the unit exam. It is neither transferable to other similar situations--nor applicable a few years later. Nor is it, for most students, even enjoyable.

<u>Why materials design and development?</u> Why not teacher training or some other approach toward improving instruction?

Whatever is taught in any given classroom is customarily determined by either the teacher in that classroom or the instructional material that is used. In either case where instruction about Africa south of the Sahara is involved the results are likely to be less than desirable.

The vast majority of social studies teachers charged with teaching about Africa south of the Sahara have little or no academic preparation in the history, goegraphy, or culture of this region. Only a few of them have any significant training in the disciplines of anthropology or geography or sociology. And very few are really able to escape their own cultural limitations in examining the cultures or history of peoples who appear to be quite different from them. Opportunities to remedy these deficiencies by study or travel, moreover, are not only infrequent but rather expensive. This is as true today as it was in 1965.

Yet, in 1965 (and even now) there were efforts underway to provide some special training on Africa to many of those teachers who needed it most. Through the aid of special federal programs (such as NDEA and EPDA institutes, fellowship programs and the like), state education department workshops, newly created university courses and/or institutes and even local in-service projects

hundreds of teachers received opportunities to become better acquainted with Africa and its peoples. Even teacher training institutions began to offer special courses in African studies to social studies teachers-to-be. Indeed, as massive as was the task of teacher training and retraining that needed (and still needs) to be done, in 1965 this job appeared to be underway--and much work along this line has been accomplished in the time since then.

But having teachers knowledgeable about their subject and able to escape their own cultural confines in teaching about it does not necessarily lead to improved classroom learning. Good instructional materials are as much a key to good learning as are well-trained teachers. Even when teachers receive special training on Africa, the limited number of relevant instructional materials which they customarily feel are available to them sharply restrict what they can--or feel they can--do.

In most classroom studies of Africa south of the Sahara, the textbook, teacher monologue, globe, wall map and an occasional narrated film are the media most employed for instructioanl purposes--and hence the major conditioners of what is learned. Generally it is the text book that largely determines the specific content about Africa that is studied. Instruction and learning about this region and its peoples have always tended to be that of "covering the text" with little deviation at all from it. Unfortunately, most texts on Africa south of the Sahara are considerably outdated, superficial, inaccurate and didactic. So, too, are the wall maps, globes, most films and even most teacher monologues! Of course, in 1965 there did exist a small number of other types of instructional materials on Africa which teachers could have used had they known of their existence. Yet these materials, too, suffered from serious content and technical limitations.

Consequently, in view of the facts that most classrooms are staffed by teachers untrained on Africa--but for some of whom at least retraining programs appeared to be well underway--and what few materials existed were terribly inadequate and showed few signs of ever being improved, any real improvement in learning about Africa south of the Sahara seemed to require immediate development and dissemination of a wide variety of new materials for use in our classrooms, materials that would combine the latest and most accurate scholarship with the great number of different media available for use in classroom instruction and learning and materials which could be useful even in the hands of the vast majority of teachers still uninformed about Africa south of the Sahara and its peoples.

It should be noted here that since Project Africa began its research an enormous quantity of commercially prepared new materials

on Africa south of the Sahara has flooded our secondary school classrooms. A superficial glance at these materials and their great variety might suggest that they have accomplished what this project set out to do. Not so. Although the quantity of available instructional materials on Africa is now more than adequate the quality is not. Almost all of the commercial materials on Africa south of the Sahara produced over the past few years suffer from a host of flaws--flaws which sharply restrict or handicap the accuracy of potential classroom learning about this region and its people. Most common among these flaws are factual errors, repeated use of emotive or loaded words, evidences of ethnocentric bias, lack of balance, numerous unsupported assertions, overemphasis on the exotic, misrepresentation and, frequently, excessively high prices. Moreover, most of these materials are extremely didactic and present content that is primarily political, chronological or geographical in nature. There is little that focuses on people, that emphasizes culture or that is from an African point of view.

Moreover, the materials produced in recent years, just as those that were available in 1965, exist primarily as isolated bits and pieces, totally unrelated to each other. Not only are most classroom teachers unaware that they exist but, because they lack time and expertise, these teachers are unable to weave these materials together into a coherent, meaningful classroom study for their students. Creating this type of integrated program involving a wide range of accurate, audio, visual, written and manipulative media is an essential aspect of improving learning about Africa. Doing this is precisely what Project Africa was all about.

Good materials are a prerequisite to improved instruction about Africa south of the Sahara--materials with a minimum of flaws, reasonably priced and capable of use by teachers untrained about Africa. These materials go far beyond the typical text or supplemental paperback approach. Filmstrips, slides, tapes, records, programs, maps, games, manipulative devices and transparencies are media which must be used in any effort to understand Africa and its peoples. Students cannot come to grips with another culture via the printed page alone. There is an affective element in knowing other peoples and it is developed only by experiencing as closely as possible their culture. This means using sight and sound as well as print. A multi-media approach to the study of Africa south of the Sahara is crucial to improved instruction about this region.

This does not mean showing a film one day, reading selections from a text the next and then listening to a record. It is extremely difficult to put together in a meaningful learning experience a number of different media produced by a number of different producers, each with different qualifications, purposes,

and objectives. What is needed is a carefully structured program on Africa that employes a wide variety of visual, written and manipulative media, all of which are intimately related to the others. Since prospects of teachers receiving training were much better than the prospects of their developing such programs Project Africa decided to focus primarily on materials development.

Why conceptual learning objectives? Why not the usual learning of facts and other data about this region?

Data learning is hardly worthwhile education. Especially where Africa south of the Sahara is concerned. While there is an increasing amount of knowledge and information available about Africa south of the Sahara, it is by no means complete. There are significant gaps in what is now known about this region and its peoples. Scholarly research, however, is narrowing these gaps, and each year vast amounts of new information become available. Not only does this add to what is already known--it very often challenges what was thought to have been true. Not only does it help answer questions that already exist--it also raises new questions. What was once considered accurate data many times is discovered to be inaccurate. Not only is the amount of data about Africa south of the Sahara that could be learned assuming massive, undigestible proportions--it is being almost daily altered in both quantity and quality.

There is little assurance, therefore, that whatever data are learned one day about Africa south of the Sahara will be accurate in later years. There is, furthermore, no indication that learning place names, boundaries, principal resources, and population statistics in any way guarantees any real understanding of this region or its peoples--or will be of any use to a student living in a twentieth and twenty-first century world.

Hence, content about Africa south of the Sahara, as all bodies of content, ought to be used as a vehicle to accomplish more useful learning objectives. Of course, in repeated working with specific data, the data itself will be learned. But the larger learnings which this data can be used to develop will be the real goals and it is toward them that the learning experiences should be directed. These larger learnings are conceptual in nature.

Conceptual objectives are of a substantive nature. These include understandings and generalizations about human behavior everywhere; analytical concepts useful in making sense of experience; skills of intellectual inquiry; and positive attitudes about school, learning, and life. It seems eminently more useful, for example, to learn that in Africa, as elsewhere, how a people live is determined largely by their habitat, their level of technology, their past history and their culture than it is to learn that the Masai drink the blood of their cattle. It seems much more

useful, furthermore, to conceptualize about the nature and process of decision-making rather than memorizing the specific ways a certain African people make certain types of decisions. It seems even more useful to use content to develop the thinking skills of the students rather than have them merely absorb the results--sometimes highly questionalbe results, too, especially where Africa south of the Sahara is concerned--of someone else's thinking.

Thus, it was decided that Project Africa ought to devote its efforts to building materials that would help students develop conceptual objectives rather than memorize masses of data, perfect skills of passive reception and develop the attitude that knowledge is made by others to be stored by students.

Why inquiry-teaching strategies? Why not more traditional teaching methods?

There are many different ways to guide learning. Some of these ways can best be described as teacher-directed or expository strategies. Teachers, textbooks, and audio-visual media tell students the essential data, interpret it for them and explain its significance. In all this the student is a passive receptor of someone else's knowledge. It is his task to absorb this information, memorize it and give it back on the next test. This approach--essentially one of read, recite, and test--relegates the student to a sponge-like role, and does little to develop the intellectual powers requisite for constructive citizenship in a society such as ours.

Another way to guide learning is that frequently described as inquiry-teaching. This strategy involves putting students in learning situations where they must engage in the same intellectual operations employed in active, problem-solving types of situations--in developing problems for investigation, hypothesizing solutions, testing these hypotheses, drawing conclusions about their validity, applying them, if valid, to new data and generalizing. Inquiry-teaching requires active involvement on the part of the student and gives him considerable control over what is learned as well as how the learning itself takes place.

Inquiry-teaching strategies are among the most creative, rewarding, and stimulating instructional strategies available for use in our classrooms. Research suggests that deliberate, conscious utilization of skills and processes of inquiry lead not only to the development of more meaningful knowledge but to knowledge that is retained longer, that has greater transferability and that is more relevant and useful to the learner. Employment of these skills stimulates intellectual curiosity and promotes active involvement in the seeking of knowledge. It makes possible a creative dealing with value-laden questions and issues. Learning and applying

the techniques of asking questions of data, hypothesizing, verifying hypotheses and drawing conclusions and the myriad of their associated skills helps develop better than any way yet devised the skills of learning how to learn, skills of critical importance in a world whose most important feature is rapid, almost unlimited and unpredictable change. And finally, inquiry-teaching makes learning fun--for teacher and student alike.

Furthermore, teaching for conceptual objectives requires the use of inquiry-teaching strategies. Concepts, generalizations and intellectual skills cannot be given to anyone so that they become a useful part of their cognitive structure. Rather, concepts, generalizations, and intellectual skills evolve in the mind of the learner. Helping students conceptualize, generalize and develop certain intellectual skills is the task of the teacher and this can best be done by putting students into inquiry-oriented learning experiences--experiences in which they must engage in active, intellectual inquiry. The use of inquiry-teaching strategies makes conceptual teaching possible.

Inquiry-teaching is particularly suited to the study of Africa south of the Sahara for other reasons, too. What is known about this region, its peoples, and their culture, history and life styles is in reality conditioned by how particular people--with all their cultural biases, unstated assumptions and unique methods of investigation--have gone about studying them and writing about the results of their studies. To teach the products of their studies as a body of accurate data is thus a contradiction in terms. But to teach it as a process of inquiry, as a process by which people try to establish meaning out of a whole host of observed data, is a most useful endeavor. Using inquiry-teaching strategies makes this possible. Its use helps students to learn how to learn on their own by exploring how other people come to know what they know and by engaging directly in the processes of meaning-making. Such learning ranks among the highest objectives of formal education today.

Of course, inquiry-teaching as an idea was not new in 1965. It has been talked and written about for years. But it had rarely been done, at least on a large scale. What was happening in social studies in the mid-1960's centers around deliberate efforts to use inquiry strategies as the basis of major curriculum improvement projects, efforts that could make such teaching a classroom reality for most teachers and students. Building instructional materials on Africa around such a strategy, offered an opportunity to improve social studies instruction in general, enliven study about Africa south of the Sahara in particular, and at the same time generate a renewed interest in learning among the average and below-average students involved in the courses in which Africa south of the Sahara was studied.

Summary

Africa south of the Sahara, as a body of content, was virtually unknown in 1965 to most secondary school teachers required to teach about it. Yet these teachers were required to teach it. And students were required to learn it. The result was and long has been a rather mundane study of the irrelevant, the erroneous, and the culturally distorted. One solution to this problem is the development of accurate, up-to-date, balanced instructional materials that can be used by teachers to facilitate the best classroom learning possible.

Even though improved instructional materials may not by themselves guarantee improved learning and teaching about Africa south of the Sahara in our classrooms, without them it is quite unlikely that any changes (to say nothing of improvements) will occur at all. Because most teachers are usually unaware of how their biases color their teaching and because these teachers are generally unacquainted with content about Africa south of the Sahara, most of what they teach is conditioned by the inadequate materials they now use. Training teachers to be better teachers may point up the inadequacies of these materials, but this will not provide better materials in their stead. Since most classroom teachers have neither the time nor the talent to build adequate instructional materials on Africa south of the Sahara it is obvious they must get these from somewhere if their teaching is to improve. In the final analysis good instructional materials are indispensable to effective learning and teaching. This is especially true when the subject is Africa south of the Sahara. Project Africa was created to design and develop just such materials.

II

PROJECT STRUCTURE AND STAFF

Project Africa was essentially a creative endeavor. Its primary goal was to design a series of highly integrated materials that could be used for instructional purposes with students of average and below-average academic abilities in various secondary school grades. Project Africa was also a pioneering effort of sorts. The body of content with which it dealt was relatively unfamiliar to most educators and was in a state of continual change and rapid expansion. Substantive resources were extremely difficult to locate and in some cases were virtually non-existent or at least unavailable. The strategy of teaching employed as the basic structure for the project's materials was also new and unfamiliar to most teachers and specialists. Furthermore, this strategy was largely untried in a classroom setting. Most of the work undertaken by Project Africa, therefore, involved research and development in areas largely unexplored by any previous curriculum research efforts. There existed no comparable previous research on which to rely for guidance or support.

Project Organization And Staff

In order to carry out a program of research and development derived from the considerations and assumptions which comprise the rationale described in the preceeding chapter, Project Africa established a number of specific objectives. It proposed:

a) To prepare an annotated bibliography of available curriculum and teaching guides and instructional materials on sub-Saharan Africa.

b) To prepare a statement of concept, understanding, attitude and skill objectives for instruction on sub-Saharan Africa.

c) To design, develop, and evaluate teaching and learning materials, including written and audio-visual instructional materials, based on scholarly research for use at the secondary level in learning about sub-Saharan Africa and its peoples.

d) To design, develop and evaluate teaching guides including questions, problems and issues for discussion and bibliographies of materials designed for specific grades and keyed to existing topics, units and courses within the social studies program.

e) To design, develop and evaluate content units on sub-Saharan Africa and its peoples for use in ninth grade

world geography, tenth grade world history and senior elective courses in secondary schools.

f) To provide a core of classroom teachers around the nation experienced in the development and design of teaching-learning materials and trained to instruct other teachers in the design and use of these and other materials in the classroom.

g) To initiate, sponsor and aid in the direction of local in-service workshops and institutes designed to train teachers in the history, culture and development of sub-Saharan Africa and the use and development of materials, guides and outlines therein.

h) To stimulate a closer and more cooperative relationship between all those engaged in the education process, including scholars, professional educators, classroom teachers and educational technicians.

Realization of each of these objectives, of course, was intended to enable the project to accomplish its ultimate goal: getting a wide variety of new instructional materials and teaching-learning aids on Africa south of the Sahara into the public domain where they would be immediately available for adaptation to the special requirements of specific curricular programs, students and interests and for immediate use in the classrooms of American schools.

Program of Operations

To accomplish its objectives, Project Africa was organized so that, in general, basic research was conducted each spring, materials were designed during special summer research workshops and experimental versions of these materials were prepared during the following fall for classroom tryout the next spring. In addition, certain research and development activities were on-going undertakings that cut across this broad structure, but generally speaking, this cyclical pattern was the organizational scheme of the entire project. The project's overall operational program is described in Figure 1.

FIRST TWELVE MONTHS

SPRING 1967	SUMMER 1967	FALL-WINTER 1967/68
1. Organization and staffing. 2. Basic research into: Available texts Existing curriculum guides Available commercial instructional materials Professional literature on teaching about Africa Scholar and teacher recommendations for teaching about Africa. Present knowledge and beliefs about Africa held by selected American secondary school students. 3. Preparation of guidelines and framework for development of project materials.	1. Research and design of model instructional materials and content units for use in selected social studies courses in grades 7-10. 2. Design and trial of instruments and procedures for a nationwide survey of selected 7th and 10th grade student knowledge and impressions about Africa south of the Sahara. 3. Continuing basic research.	1. Editing of model materials, preparation of teaching guides and audio, visual and written materials for tryout in selected experimental classrooms. 2. Design of evaluation procedures for limited classroom tryouts. 3. Conduct of nationwide survey and analysis of data. 4. Continuing basic research.

Figure 1 Project Africa Program

SECOND TWELVE MONTHS

SPRING 1968	SUMMER 1968	FALL-WINTER 1968/69
1. Limited classroom trials of model units, materials, teaching strategy. 2. Research and design of new model materials. 3. Evaluation of limited classroom trials and analysis of evaluation data. 4. Continued research into available commercial materials. 5. Analysis of data collected in nationwide survey.	1. Revision of model materials, teaching guides, and content units and research and design of additional materials. 2. Design of evaluation procedures and instruments for national field try-out evaluation of 7-10th grade program of study. 3. Preparation of final technical reports on nationwide survey of selected students and on other basic research.	1. Editing, preparing, printing and distributing materials comprising program for classroom evaluation. 2. Arranging final nationwide classroom field evaluation. 3. Editing, publishing and distributing project technical reports on nationwide student survey and on results of basic research. Placing of materials in ERIC

Figure 1 Project Africa Program (con't)

FINAL SIXTEEN MONTHS

SPRING 1969	SUMMER 1969	FALL-WINTER 1969/70
1. Nationwide field evaluation of 7-10th grade program of study.	1. Compilation of data collected in nationwide field evaluation.	1. Processing and evaluating data collected in nationwide field evaluation.
2. Editing, preparing and distributing final materials for use in field evaluations.	2. Research and design of materials for selected model units for use in 12th grade social studies courses.	2. Research, design and editing of materials for selected model units for use in 12th grade social studies courses.
3. Basic research into possible structures for 12th grade program of study.	3. Redesign and revision of experimental materials for deposit in ERIC.	3. Coordinating teacher dissemination workshops.
4. Preparation of guidelines for development of model units for use in 12th grade social studies courses.	4. Preparation of guidelines for and organization of teacher dissemination workshops.	

SPRING 1970
1. Preparation and dissemination and deposit in ERIC of complete technical report on field-trial evaluation of 7-10th grade program.
2. Research, design and editing of model units for use in 12th grade courses. Deposit of units in ERIC.
3. Preparation of final report.

Figure 1 Project Africa Program (concl.)

The first phase of Project Africa's developmental research concentrated on basic research into all aspects of teaching about Africa south of the Sahara relevant to the project objectives. Efforts were made to identify and analyze what already existed in terms of curriculum and materials; what teachers, African specialists and educationists proposed for the future; and what Project Africa itself could specifically do. These efforts involved detailed studies of local and state curriculum guides, commercially available instructional materials, the professional literature on teaching about Africa, and scholar and teacher opinions and suggestions. In addition, a survey of student impressions and knowledge about Africa south of the Sahara was designed and administered to selected secondary school students throughout the United States.* From this research emerged a sharp awareness of specifically what had been done and still needed to be done in teaching about this region and its peoples--including pitfalls to be avoided, gaps to be filled and areas of major concern to educators and students alike.

Thereafter, the Project determined to focus its efforts on developing an integrated program of materials, teaching guides and content units for use in seventh through tenth grade courses where Africa is normally studied in American schools. After developing guidelines for the design of such a program, the Project devoted the summer of 1967 to researching and designing model materials embodying the results of the latest and best scholarship on Africa and utilizing a wide variety of different audio, visual and printed media. During the Fall these model materials were then structured into teaching units built on an inquiry-teaching strategy and edited and prepared for try-out in a number of classrooms throughout the nation during the following spring.

These classroom trials revealed both the shortcomings and the strengths of these model materials. During the summer of 1968, the project's materials were completely revised, new materials developed and others discarded. Fall 1968 was devoted largely to weaving these into a carefully integrated sixteen week program of study that included detailed daily lesson plans and many different types of audio, visual and written media. Simultaneously plans were prepared for a formal, nationwide classroom try-out and evaluation of this program of study. This try-out was conducted during the spring semester of 1969 in twenty-three school systems located in various regions throughout the United States. The publication of the results of this evaluation and the deposit in the public domain (via ERIC) of the materials used in the formal field trials concluded this second phase of the project research.

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*See Chapter III for detailed descriptions of this research.

Project Africa's final phase of research and development was devoted to preparing model materials for use in twelfth grade social studies courses. Activities associated with this endeavor were organized similarly to those involving the design of the 7-10th grade programs of study. Guidelines for the design of the twelfth grade units were devised during the spring of 1969 while the 7-10th grade materials were undergoing formal classroom evaluation. During that summer material for model units was researched. During the following fall, winter and spring this research was rewritten and edited into resource units and their associated instructional materials. Because there was neither time nor funds for worthwhile classroom try-out of these units, however, the project was unable to evaluate them under actual classroom conditions. Consequently, these model materials were deposited directly in the public domain as resource units rather than as an actual classroom program of study.

Of course, throughout the forty months devoted to the research and development activities just described, numerous other research and development continued. Identification of useful audio and visual resources and development of prototype model materials was an extremely long, drawn-out task and, in some instances, took several years to complete. Compilation, analysis and reporting of surveys and field test results also was an ongoing effort that cut across other developmental activities. So, too, was identification and analysis of all the commercially prepared instructional materials available for use in studying Africa south of the Sahara in American classrooms.

This last undertaking, for example, started as simple research into a relatively small number of existing materials in March 1967 but mushroomed to become an extremely time-consuming, extended effort as literally hundreds of new instructional materials appeared in subsequent months. Thus, while the materials development work of Project Africa was organized around a cycle of design, editing, field trial evaluation and dissemination, other research activities continued in operation throughout the entire duration of the project.

Project Staff

A multitude of talents were required to accomplish the objectives set for Project Africa. Hence, the project staff included a number of specialists in African studies; in teaching, learning and evaluation; and in curriculum design, materials and media. Project Africa was, in a word, a cooperative effort of African scholars, experienced classroom teachers, students, media technicians, and educationists.

Most of the work on Project Africa was conducted and directed by a permanent staff of four--a director, associate director, re-

search associate and administrative secretary. Administrative tasks such as routine correspondence, budget preparation and administration, workshop and field survey evaluation, coordination and report writing were handled by the director, Dr. Barry K. Beyer. Overall direction of the project research and development activities was also his responsibility as was the design, editing, production and distribution of all project materials--including audio and visual as well as written materials. In addition, the director played a major role in creating most of the audio-visual materials, teaching strategies, content units and student materials. Approximately 90% of his overall contract time was devoted exclusively to the work of this project.

The associate director, Dr. E. Perry Hicks, was co-author with the director of the project and played a major role in all of its activities. Since, in the interim between approval and funding of the project, he had joined the faculty of a university some distance from the institutions where Project Africa maintained offices, Dr. Hicks fulfilled his role on a part-time consultative basis during each academic year and on a full-time basis during each summer quarter. Dr. Hicks assumed major responsibilities for designing the nationwide survey of student impressions of Africa and for designing the formal field trials of the 7-10th grade materials and compiling and analysing their results. He also engaged in considerable substantive research and basic materials design and evaluation.

The position of project research associate was filled by graduate students in social studies education at The Ohio State University and by graduate students in history at Carnegie-Mellon. In each case the student filling this position was an experienced classroom teacher engaged in doctoral study at his respective institution.* In general, these part-time research associates assumed, in turn, many responsibilities for certain basic research and/or development activities of the project, such as surveying and analyzing existing instructional materials on Africa, collecting statistical data on all aspects of African history and development, designing selected model units and associated materials and analyzing and preparing technical reports on various aspects of the project's field trials evaluations.

The administrative secretary not only handled all the routine office, clerical, and secretarial chores typically associated with any curriculum development endeavor of the magnitude of Project Africa--and these were voluminous and most time-consuming--but also typed, retyped, duplicated, assembled and boxed all the reports, teaching guides, content units and written instructional

*See Appendix A for a list of Project Africa staff, consultants, experimenting teachers and contributors.

materials produced by the project. Needless to say, these tasks constituted more than a full-time responsibility.

The quartet of staff members just described constituted the core personnel of Project Africa. But in addition, the project's staff included a consideralbe number of other educators and specialists. Some of these staff members served the project on a continuing but part-time basis. Others provided consultative assistance at rather irregular intervals whenever their expertice was needed. Some of these consultants were classroom teachers; others were university scholars specializing in African studies; while still others were educationists specializing in curriculum and evaluation or technicians with expertise in the graphic arts and/or educational media. And some were students.

Classroom teachers played a major role in Project Africa. A number of teachers, experienced in working with the kinds of students for whom project materials were to be designed and also knowledgeable about Africa south of the Sahara as the result of extensive university study, travel and/or residence in Africa itself were regularly employed summers to research and design materials for the project. Some of these teachers also were employed during the academic year following their summer curriculum research to experiment with and evaluate project materials in their own classrooms. Other teachers, a few somewhat knowledgeable about Africa but most lacking any formal preparation in African studies, served the project as classroom evaluators and as teachers of field trial classes in which project materials were tested.

Academic specialists, on the other hand, served the project in somewhat different roles. A trio of university scholars--Professors Graham W. Irwin of Columbia University, Burton Witthuhn of The Ohio State University and James Vaughan, Jr., of Indiana University--provided regular, continuous guidance to the project throughout its existence. These scholars, meeting with other members of the project staff in special planning, evaluative and research conferences and work sessions, helped develop guidelines for project materials, critiqued and assisted in the creation of some of these materials themselves, located and provided pertinent research data and generally authenticated the content used in the project's materials. Professor Witthuhn, in addition, played a major role in designing a number of visual, manipulative and programmed materials developed by the project. Each of these scholars worked closely and continuously with the teachers and other staff engaged in the project's research and development activities.

Other university specialists on Africa also played important roles in the work of Project Africa. Some, such as Professors Fred Burke, Absolom Vilakazi and Vernon McKay provided repeated counsel and direction and also participated extensively in the

project's evaluation and dissemination activities. Many provided materials, often the results of years of personal research, and loaned slides and tape recordings to the project for experimentation. Others offered suggestions as to sources of needed information and at times provided this information itself. Although Project Africa was neither a part of nor sanctioned by the African Studies Association, this association used its services and good offices to put the project in touch with numerous university scholars who provided other valuable advice and assistance.

Project Africa also benefitted greatly from the contributions of a number of specialists in testing, evaluation and teaching. Professors Kelly Duncan of The Ohio State University and Clarence Williams of The University of Rochester and Dr. Dana Kurfman of the High School Geography Project provided special assistance in curriculum structure and field trial evaluation. Numerous other educationists loaned slides and other materials to the project, as for that matter did interested classroom teachers not otherwise involved in our work.

Graphics artists, professional photographers, media technicians and educational materials specialists played important roles in the work of Project Africa, too. Because the project attempted to produce a wide variety of audio and visual materials, their assistance and advice was especially valuable. The design and development of single-concept filmstrips, student maps, overhead transparencies and programmed texts benefitted greatly from their expertise.

Students, too, participated in Project Africa, albeit not as formal staff members. Over three hundred seventh, eighth and tenth graders participated in the Spring 1968 classroom experiments with project model materials to determine their feasibility as instructional and learning tools. Each of these students prepared weekly and unit evaluations; many of them wrote extensive critiques about these materials offering detailed suggestions for improvement; approximately half of these students prepared taped commentaries about the materials they used; a large number were interviewed in their classes for reactions to the project materials and program. An additional seven hundred students participated in the more fomal, sixteen week field trials during Spring 1969. Thus, students played a significant role as users and evaluators in shaping the work of Project Africa.

Although Project Africa's permanent staff was quite small in numbers, the Project itself did employ the services of a large number of specialists in various areas of concern to the project's work. Some of these specialists served the project on a continuous if somewhat part-time basis during its entire period of operation. Others provided assistance when it was most needed. Eventhough the overall efforts of all these consultants, contributors and

staff were coordinated, supervised and woven together by the director and associate director, in the last analysis Project Africa's work must be regarded as the result of a cooperative effort on the part of many people.

Major Activities of Project Africa

The work of Project Africa's staff--that is the activities in which they engaged--can be classified into three basic areas of curriculum research and development. There were activities involving the (1) design and development of instructional programs and materials on Africa south of the Sahara, (2) evaluation of these instructional materials and (3) dissemination of information about materials and methods for teaching about Africa south of the Sahara.

The majority of Project Africa's efforts were devoted to activities of this first type--activities relating to the creation of new instructional programs and materials for use in teaching about Africa south of the Sahara. These activities were quite diverse and, as noted above, consumed considerable time and resources. Extensive research into all dimensions of teaching about Africa had to be conducted even before the broadest outlines of any new program on Africa could be devised. Once this general structure was designed, however, then the much more difficult creative tasks of selecting objectives, identifying content, locating appropriate audio, visual and written sources and preparing actual learning materials had to be undertaken. Finally, it was necessary to weave all these materials into complete, day-by-day lessons, these lessons into units and these units into the structure for which they were originally designed--all of this around a detailed but relatively new and untried strategy of inquiry-teaching. The pitfalls in these activities are obvious, indeed.

Evaluation of the materials and program designed by Project Africa staff and consultants was a second major project activity. This evaluation had several dimensions--it included both formal and informal evaluations, classroom tryouts and conference critiques, and evaluations by project staff as well as outside consultants. Much evaluation was actually part of the developmental process itself. However, the most significant evaluation activities involved classroom tryout and evaluation of a major portion of the materials created by the project.

Finally, dissemination is an important aspect of any curriculum improvement effort. Although Project Africa originally proposed a dissemination effort of major proportions, reductions in funds seriously limited its efforts in this direction. Nevertheless, the Project staff did undertake a number of activities designed to disseminate to interested educators not only the

results of its own developmental research but also a wide variety of information and assistance relative to teaching about Africa south of the Sahara in American secondary schools.

The products and results of each of these basic types of project activity--materials development, evaluation and dissemination--constitute the fruits of Project Africa's research. Each of these contains lessons and implications for similar curriculum research that may be undertaken in the future. Hence, each deserves more detailed discussion here. The following three chapters focus, in turn, on each of these aspects of curriculum development as undertaken by Project Africa.

III

MATERIALS DESIGN AND DEVELOPMENT

Project Africa was created primarily to design new instructional materials. Three different groups of such materials were, in fact, developed and placed in the public domain by the project. The most comprehensive group of materials comprised a flexible, sixteen-week program of study entitled Africa South of the Sahara: An Inquiry Program for Grades 7-10.* A second group consisted of resource units and associated materials for use in twelfth grade courses of study. Finally, a number of other materials, prototypes of which were designed by the project but not included in either the 7-10th grade or the twelfth grade groups of materials, were also produced. The purpose of this chapter is to describe these materials and the principles upon which they were based.

Basic Research

Effective curriculum development on Africa south of the Sahara requires a rather detailed understanding of the current state of teaching and learning about this region in American schools as well as a sense of desirable future directions. Accordingly, the staff and consultants of Project Africa directed initial developmental research into three general areas:

(1) What selected American secondary school students knew and believed about Africa south of the Sahara.

(2) The types and characteristics of commercially prepared materials that could be used in secondary school classroom study about Africa south of the Sahara.

(3) What educators and specialists on Africa suggested as desirable directions, structures, methods, materials and points of emphasis in any secondary level study of this region and its people.

This research generated the basic structures and guidelines around which were developed the materials created by Project Africa.

Student Survey: Worthwhile study about any subject cannot be undertaken without considering what students already know or believe about that subject. In order to determine precisely

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*Although the original project proposal called for developing materials for use in grades 9, 10, and 12, at the suggestion of the U. S. Office of Education materials were also designed for use in other junior high school grades.

what American secondary school students already did know about Africa south of the Sahara, Project Africa conducted--during the Fall of 1967--a special survey of 3259 seventh and twelfth grade students in 28 school systems in 24 different states representing all major sections and types of schools in the United States. The survey was designed to provide data about student knowledge of Africa both before and after any organized secondary school classroom study of this region and its people.

Our survey consisted of two instruments. One, a world regions perception instrument, consisted of an outline map of the world, divided into seven regions, and ninety cards, each containing a different word or phrase. Each student was asked to place each of his ninety cards on the region with which he associated its word or phrase on first sight. These cards were then placed in appropriately labelled envelopes and returned to the project for analysis. The second instrument was a multiple-choice test of student knowledge about African history, economic development, culture, indigenous society, physical geography, and current affairs.

Analysis of the survey results revealed that American students possess a very clear-cut and strongly stereotyped image of Africa south of the Sahara--an image that can best be described as "Tarzan-like." Africa, to the vast majority of these students was a hot, primitive, backward, underdeveloped land--a land of jungles and deserts, populated by wild animals on the one hand and by naked, black savages on the other. Of the ninety stimulus words or phrases included in the survey, over 75% of all the students surveyed associated the terms listed in Figure 2 with Africa south of the Sahara.

The results of the multiple-choice knowledge test were in keeping with the stereotyped impressions revealed by the first instrument. The students surveyed knew relatively little correct information about Africa south of the Sahara. Twelfth graders seemed to know more about most aspects of Africa than did seventh graders, yet both groups knew very little about indigenous African society and culture and virtually nothing at all about Africa's history before the European penetration. Moreover, neither seventh nor twelfth graders scored significantly higher than chance on any of the sub-tests of the knowledge instrument.

Although certain patterns did emerge in the analysis of these data by types of schools and regions of the nation, it was not possible to make any precise generalizations. Both knowledge and stereotyped impressions appeared to be more evident in urban and suburban schools than in rural schools. Both knowledge and the tendency toward these same stereotypes were least strong in the West. But, more significant was one other result of this survey--analysis of the results suggested that those students who are best

Figure 2

Stimulus Terms Placed In Africa South of The Sahara By At Least 75 Percent of the Students

SEVENTH GRADE		TWELFTH GRADE	
Stimulus Terms	**Percent**	**Stimulus Terms**	**Percent**
Wild Animals	87.25	Witch Doctors	92.78
Daktari	85.32	Wild Animals	91.40
Elephants	84.32	Drums	91.00
Witch Doctors	84.66	Daktari	90.69
Jungles	79.64	Black	89.45
Tigers	79.38	Spears	89.72
Spears	79.17	Tribe	88.19
Tribe	78.36	Savages	88.08
Natives	77.98	Elephants	86.65
Poison Darts	77.57	Natives	86.49
Drums	77.33	Cannibals	84.90
Black	76.94	Pygmies	84.11
Savages	75.90	Poison Darts	82.06
		Naked	78.21
		Tigers	77.66
		Jungles	76.12

informed about Africa south of the Sahara, twelfth grade urban and suburban students, are also most likely to be the most mis-informed about it, to hold with greater certainty most of the erroneous stereotyped impressions typical of the existing "Tarzan-like" image described above.

The results of this survey accented a number of limitations of traditional classroom study about Africa south of the Sahara. They also pointed up serious deficiencies and gaps in this study and suggested not only certain objectives for project developed materials, but also areas of study where heavy emphasis was needed. A complete technical report of this survey, including a detailed analysis of its implicatiions for teaching, was prepared under the

title, Images of Africa: A Report on What American Secondary School Students Know and Believe About Africa South of the Sahara.*

Survey of Available Instructional Materials: Examination of existing commercially-prepared learning materials on a particular region can lead to useful insights into significant weaknesses and gaps in materials already available for classroom use, and by so doing suggest desirable directions for future materials development. Therefore, Project Africa's staff conducted an extensive survey of all the commercially prepared instructional materials on Africa south of the Sahara which existed at the project's inception and which became available during subsequent months.

This survey consisted basically of two distinct efforts. The first effort was a content analysis of a number of the most widely used and readily available textbooks in secondary school world geography and world history or world culture courses. What this study revealed was not at all unexpected or surprising. Almost without exception, the treatment of Africa in the hardcover textbooks examined was distinguished by superficiality, ethnocentric bias, outdatedness and innumerable factual errors. This was as true of the pictures and illustrations included in each book as it was of the text itself. Moreover, the didactic style in which these volumes were written grossly distorted what is really known about this region of the world.

The second aspect of the project's instructional materials survey dealt with non-textbook instructional materials. Project staff identified and obtained for examination over two hundred 16mm films specifically on Africa south of the Sahara as well as over five hundred other pieces of material ranging from paperback texts to written programs, simulations, slide sets, filmstrips, records, tapes, 8mm film loops, games, realia, art reproductions, overhead transparencies, and so on.

Examination of each of these materials revealed their overall strengths and weaknesses as conveyors of information about Africa as well as learning tools. We found, for instance, that the vast majority of commercial materials on Africa suffer from one or more serious limitations--including factual inaccuracies, various types of bias, imbalance or distortion, unsupported assertions, use of "loaded" words, and overemphasis on the exotic and unusual as well as misleading titles, poor quality, excessive length and other more mechanical flaws. In addition, we found,

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* See Appendix B for a complete listing of all technical reports prepared and produced by Project Africa

as in the case of the textbooks examined, an overemphasis on the European period of Africa history, on physical geography, on products and capitals and on political history, while there was an almost complete lack of attention to African culture, society, the arts--past and present--as well as to African history prior to the European penetration.

This survey thus helped the Project identify weaknesses to be avoided in materials development. It also revealed certain content areas, media and techniques that receive inadequate attention or use in classroom learning about Africa. Finally, the survey resulted in identifying a rapidly increasing number of materials that, inadequate as they were, already did exist and could be used by creative, well-informed teachers to aid their teaching about Africa. Subsequently, annotated descriptions of these materials were compiled in a report entitled, Africa South of the Sahara: A Resource Guide for Secondary School Teachers that was distributed free to interested teachers and deposited in ERIC for future use by other educators.

Survey of the Experts: The results of the student survey and the survey of available instructional materials were partially confirmed and amplified by a survey of the opinions and suggestions of "experts" contained in their writings in the professional literature, in state and local curriculum guides, and in working papers prepared for use by the project. The purpose of this survey was to identify what educationists and specialists on Africa south of the Sahara believe American students ought to learn about this region, how their study of it might best be structured and what materials might be most useful. Working papers on these same topics, epecially prepared by selected classroom teachers and social scientists, provided additional information about commonly-held but erroneous stereotypes, suggested knowledge objectives, and guidelines requisite for developing a worthwhile study of this region. Analyses of over one hundred state and local curriculum guides on Africa provided an insight into what was being taught--and thus also not taught--and the materials schools considered most useful.

The survey of the professional literature on teaching about Africa proved to be by far the most revealing aspect of this research. One of the most significant revelations of this survey was the fact that the study of Africa south of the Sahara in American schools, and the why, what and how thereof, had never been of much concern to American educators and specialists on Africa, at least as measured by the quantity and quality of writing devoted to it. Some opinions were found on all of these topics, of course, but they tended to be widely scattered, overly general and somewhat superficial. Only one educator, Professor Leonard S. Kenworthy, seemed to have developed a coherent approach to the study of Africa in American schools. What was found else-

where was vague, indeed. Although various rationale and objectives for studying this region were identified, almost all were oriented primarily toward understanding Africa as it related to other parts of the world or to the United States and its role in world political or economic affairs. What suggestions were made about content to be studied seemed to stress unlearning a few select myths and stereotypes. Virtually nothing specific was uncovered regarding useful ways to organize a secondary-level classroom study of Africa. A report on this study was also prepared by the Project.

The three types of research outlined here were conducted simultaneously, although the survey of available learning materials continued far beyond the completion of the other studies. The results of these efforts were useful in two ways. From them evolved a precise rationale and specific objectives for Project Africa as well as detailed guidelines for its operation and for the materials it was commissioned to develop. In addition, those aspects of the research deemed most relevant to classroom teachers were compiled and published in four reports so they would be immediately available to teachers. Copies were distributed to interested educators and were also placed in the public domain for distribution through the ERIC Document Reproduction Service. These reports are:

1. Africa South of the Sahara: A Resource Guide for Secondary School Teachers. (1968) This 210 page guide contains a descriptive bibliography of over 500 commercially-prepared, non-film materials on Africa as well as summaries of the Project's student survey and survey of the literature, and a statement of guidelines for developing local programs of study on Africa south of the Sahara.

2. New Instructional Materials on Africa South of the Sahara. (1970) A 46 page supplement to the above, containing descriptions of over 200 instructional materials published between September 1968 and March 1970.

3. Images of Africa: A Report on What American Secondary School Students Know and Believe About Africa South of the Sahara. (1968) This 36 page report is the technical report of a nationwide survey of selected students to identify what typical American students know and imagine about this region. It includes detailed presentation and analysis of the results of the survey as well as a discussion of its implications for the classroom.

4. Africa South of the Sahara: An Objective Test for Secondary Schools and World Regions Perception Survey. (1968) This report consists of copies of the test instruments used in the nationwide survey of students accompanied by answer key and directions for administration.

Africa South of the Sahara: An Inquiry Program for Grades 7-10

The majority of materials developed by Project Africa constitute a special sixteen-week, carefully integrated program of study entitled Africa South of the Sahara: An Inquiry Program for Grades 7-10. This program of study was designed in accordance with specific guidelines established by the Project staff and consultants based on their preliminary research and study. These guidelines specified that any program of study and materials on Africa south of the Sahara for use in grades 7-10 in American schools should be:

1. Immediately useful. They should be capable of being used within existing world geography or "non-western" studies courses in grades 7-9 and/or world cultures or world history courses traditionally offered in the 10th and 11th grades.

2. Flexible. The program of study should be both a one-semester course complete in itself without need for any prerequisites and at the same time be useful as part of a larger course of study if desired. All major units should fit together as a complete whole, but each unit should also be complete in itself so that it can be "plugged into" any existing, relevant programs of study.

3. For use by the typical students. The program and its associated materials should be capable of use by and with students of average reading ability and intellectual abilities, but materials for use by students of lower as well as above-average ability levels should also be included.

4. Conceptually-oriented. Content about Africa should not be treated as an end in itself but rather used to fulfill the objectives of the curriculum and course of which it is a part. This content should serve not only as a goal (to be learned) but also as a vehicle to achieve broader cognitive and affective objectives of the social studies.

Specifically, the primary emphasis ought to be on people and human behavior. Study should focus on various aspects of four or five cultures (selected to represent different regions, different cultures, different forms of government and so on). The students should generalize about their common features and note significant differences, explore how and why these exist and examine the current problems, changes and trends which affect Africans. Such a study should lead to the development of understandings which, when evaluated, should lead to the development of generalizations valid for Africa south of the Sahara. <u>These generalizations should then be considered tentative hypotheses and used as tools to investigate other world regions in the quest for valid generalizations about people of other cultures including our own</u>.

5. <u>Multi-disciplinary</u>: No single discipline can tell the whole story of any people or culture including those of Africa. Consequently basic analytical concepts of all social science disciplines (such as concepts of role, status, norm, sanctions, spatial interaction, resource and so on) should be used to give meaning to data as well as serve as basic learning objectives.

6. <u>Highly-selective</u>: The program should avoid any attempt to "cover" all facets of the region just as it should avoid any attempt to hopscotch across the continent by studying only one example of each feature. Content and objectives selected must be relevant to and consistent with the broader objectives of the course of which the study of Africa is a part as well as of the overall goals of the entire social studies program. Teaching complex ideas with too little knowledge and teaching too much about too many places in too short a time should be avoided. The content selected must be studied <u>in-depth</u>.

7. <u>Studied from the inside</u>: The program should attempt to study Africa from the African point of view--not through the eyes of another culture. Students should read materials written by African authors and experience as nearly as possible first-hand contact with African culture and society by using and studying art, literature, music, folklore, and other physical and intellectual products of African culture. In so doing the study should avoid:

   a) emphasizing as typical the exotic, unusual and strange.

b) giving the impression that Africans are inferior to other cultural groups.

c) treating the region only as it relates to the United States.

d) making invidious comparisons.

8. Based on the best scholarship: Content used and conceptual knowledge selected as objectives should represent the highest standards of scholarship. Students must deal with various interpretations of features studied where these exist. This study should by no means convey any sense of utter finality; it should not appear to present the ultimate truth about Africans or Africa. Rather, the program should strongly suggest the limitations on what is known as a certainty about Africa south of the Sahara. It should suggest open-mindedness and uncertainty. A spirit of inquiry should be reflected and fostered.

9. Inquiry-oriented: This program should be learner-centered. Students should be required to engage in learning experiences in which they must engage in all the intellectual operations that constitute inquiry. They should be guided, stimulated and encouraged to use data to build their own perceptions rather than swallow unexamined those of other observers.

10. Multi-media. A wide variety of audio, visual and written media should be used in this program. Media should be employed that can help students feel African life and culture and that will involve them in active intellectual efforts at inquiry.

Africa South of the Sahara - An Inquiry Program for Grades 7-10 is designed in accord with these guidelines. It can be used in any grade, seven through ten, where Africa south of the Sahara is already studied--generally in world geography, world history and/or world cultures courses--and by students of average, as well as below or above average academic ability. It is conceptually-oriented and multi-disciplinary in approach. It provides an opportunity to study Africa from the inside and in-depth. It is built around an inquiry strategy that requires students to use information about Africa to achieve broader cognitive and affective objectives. Content used in this program reflects the highest standards of scholarship as well as the findings of the most recent scholarly research. And the program is highly flexible--it may be used as a one semester course complete in itself or its major components may be used independently of each other by being "plugged into" existing courses.

Africa South of the Sahara: An Inquiry Program for Grades 7-10 aims essentially to destroy erroneous stereotypes and correct misinformation commonly held about Africa south of the Sahara, to help students develop a clearer perception of themselves per se and in relation to others in our own society, and to develop the skills and attitudes requisite for effective independent learning in the future. The entire program is designed so that students will enjoy learning and will succeed at it, thereby perhaps developing a more positive self-image than they otherwise might have.

This program of study consists of the equivalent of twenty 4-5 day units, each with its own specific cognitive and/or affective objectives. Study of each of these is intended to help students achieve the general objectives of the complete program which include:

Cognitive

1. To know selected concepts from the social sciences, concepts such as role, areal association, citizenship, decision-making, socialization, and landscape, so that when confronted with new data about other peoples these concepts may be used to order that data.

2. To know meaningful generalizations about human behavior in Africa so that given an opportunity to study other peoples these generalizations may be used as organizing hypotheses.

3. To know specific factual information about Africa south of the Sahara so that when presented with statements about its lands and peoples erroneous stereotypes, misimpressions and inaccuracies will be correctly identified.

4. To understand their relationships to others and to their own society by being able to compare their own lives to similar data about the lives of a variety of Africans.

5. To know a strategy for learning and be able to use this strategy to solve problems successfully when confronted with unfamiliar data.

6. To know the skills of intellectual inquiry (including those of defining problems, hypothesizing, determining the logical implications of a hypothesis, distinguishing Fact from opinion, distinguishing relevant from irrele-

vant data, categorizing, and so on) by using these skills to solve problems correctly.

Affective

7. To enjoy learning as evidenced by volunteering to participate in class discussions, to do outside assignments, and to ask questions.

8. To become interested in Africa south of the Sahara as evidenced by volunteering information about Africa secured on their own from newspapers, television and other sources, by selecting books on Africa to read on their own, by talking about it during non-class activities and so on.

9. To develop the attitudes and values supportive of inquiry so that when confronted with new data or problems inquiry will be used in preference to any other way of learning.

10. To develop a positive self-image that says in effect "I can succeed. I do belong. I do count," so that when placed in new learning situations students will exhibit confidence and self-assurance.

The structure of this program sharply reflects these objectives. This structure has two dimensions--a content structure and a methodological structure. The general structure of this program is described in Figure 3. Its content is organized around three basic questions--Who are the peoples of Africa--what are they like? How did they get that way? What are they becoming and why? Each of these questions is the focus of a five-week unit of study (referred to as a Topic) which, in turn, consists of approximately four or five four-day units on specific subjects related to the general theme of the overall Topic.

Topic I, for example, focuses on the physical geography of Africa and on four contemporary African peoples--including the Hausa, !Kung, Mech'a Galla and Kikuyu. Each of these peoples was selected to represent a region, a kinship system, a specific way of life, a type of cultural pattern, a form of government or some other feature which, taken together, are characteristic of contemporary Africa south of the Sahara. Emphasis is placed on the study of the habitat, traditions, customs, behavior and institutions of each people in order to identify their fundamental values, mores and beliefs and to make hypotheses about just who these people are and how they are similar or dissimilar to other peoples. Study of this Topic is designed to develop a number of generalizations about <u>human behavior</u> and culture in Africa, generalizations that can serve as hypotheses and organizational structures for

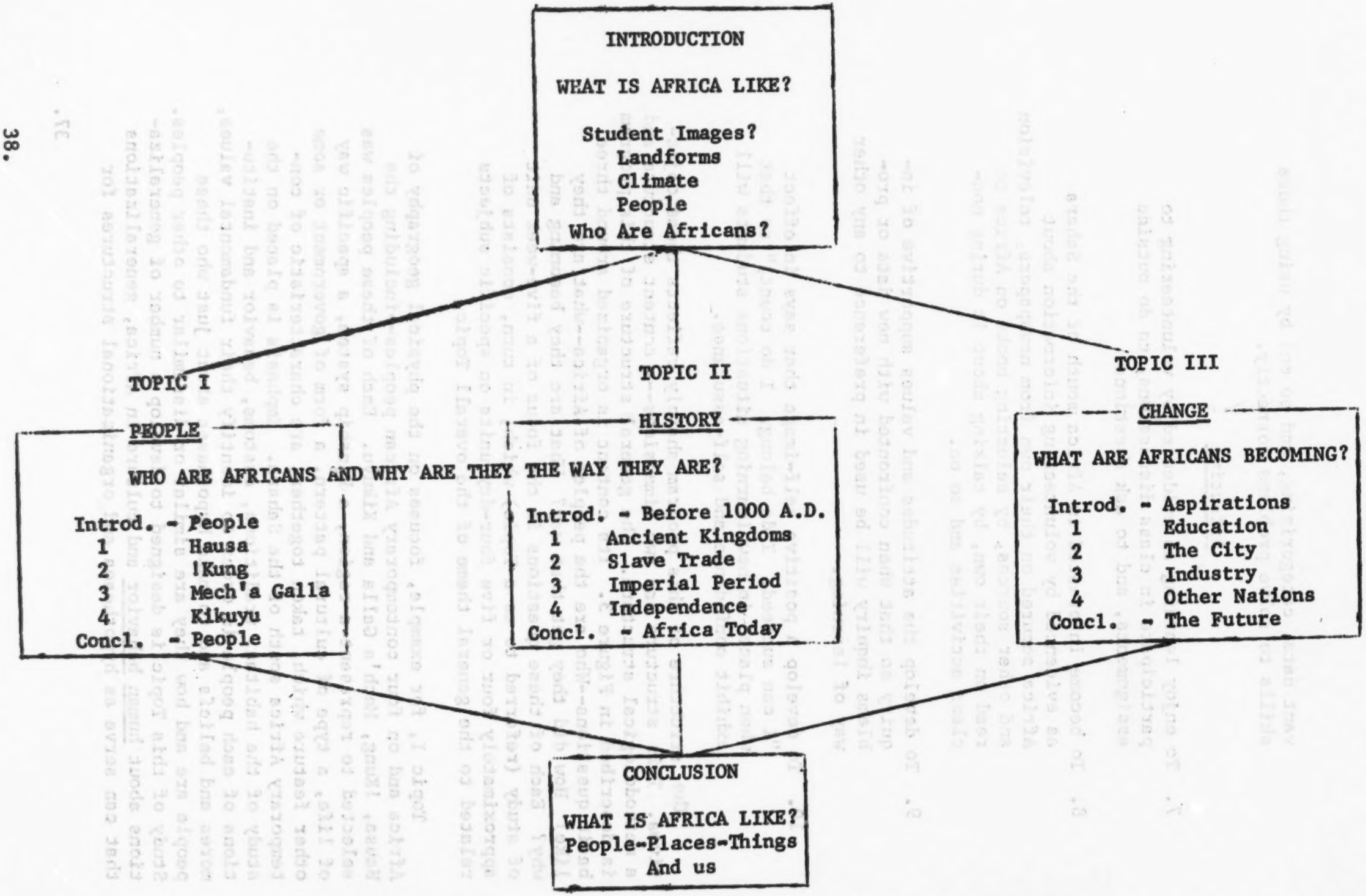

Figure 3 Africa South of the Sahara - An Inquiry Program for Grades 7-10

later study of other peoples living in other cultures (including the students' own culture), with the ultimate objective of developing broad generalizations applicable to and descriptive of human behavior in general.

The second topic focuses on social, economic, political and other forces that have been operative over time to shape the way Africans now live. It is designed to provide an awareness of Africa's awakening sense of history as well as to give an insight into the sources of their feelings and actions today. Studies in-depth are made of Africa before 1000 A.D., Black African kingdoms, the slave trade, the impact of European rule in Africa and African independence. Study of this Topic is intended to develop insights into and generalizations about the forces that shape contemporary human behavior and institutions in Africa--insights that may then serve as hypotheses and organizational structures for later study of other peoples in order to develop broad generalizations about the sources and styles of culture in our world. Emphasis, however, is placed on the impact of these forces on individuals rather than on the nature of these forces themselves.

Topic III emphasizes contemporary Africa and the changes presently underway in the lives of its peoples. It is a study of the aspirations of Africans, the ways in which they are attempting to realize these aspirations and the impact of what they do on ways of living, thinking, valuing and so on. Study of this Topic is intended to provide an understanding of the move away from individual or family self-sufficiency in the local setting to interdependence in an ever-enlarging world-wide setting, as well as of the continuity in change. The content deals with urbanization, education, rising economic expectations, intergroup dynamics, and creative self-expression. This is a study, in effect, of the impact of change on individuals and their cultures as whole.

The methodological structure of Africa South of the Sahara - An Inquiry Program for Grades 7-10 is inquiry-oriented. The introduction to the program is designed to raise the kinds of questions described above and then to generate hypotheses about these. Topics I, II and III provide data relevant to testing these hypotheses. The conclusion to the entire program requires students to tie up their inquiry by drawing meaningful conclusions, however tentative they might be. Each of the three major Topics is also organized in this way as are each of their constituent units. The daily learning activities themselves are designed in such a way as to require students to engage in a process of intellectual inquiry and to use the skills associated with this process.

For example, students study the Mech'a Galla for several days in an effort to test their hypotheses about what the inhabitants of Africa south of the Sahara are like. They start by hypothesizing about the nature of the Galla after listening to

a tape-slide presentation. Then, they examine selected data and revise their initial hypotheses. At this point the students are asked to determine the types of sources to which they could go to check the accuracy of the inferences they have made thus far and the kinds of evidence they need to find (and not to find) if these inferences are indeed accurate. Thereupon, the students examine data from some of the sources they have identified--including written materials, photographs in the form of a filmstrip without captions or narration and a report on Galla life by a noted anthropologist. Finally, the students reexamine their study of these data and modify them to reflect what they have discovered. The conclusions arrived at may then be held in abeyance while another people, the Kikuyu, are studied or they may be used as hypotheses to study these people. Eventually, the conclusions developed in the studies of each of the four African peoples in Topic I are brought to bear on the original hypotheses devised in response to the initial problem--Who are the peoples of Africa south of the Sahara and what are they like?

The materials and techniques which comprise this program are many and varied. They include a small booklet of student reading materials, data sheets, a teaching guide (which contains daily lesson plans, background information for the teacher and guides to various learning activities) and a large number of audio, visual and graphic materials for each of the three major Topics.

It should be noted that considerable efforts have been made to minimize the amount of "textbook type" written materials included in this program. One thing that seems to turn students off in social studies courses is the excessive amount of reading they are required to do--and the poor quality of the writing they must read. Where it has been desirable to include written materials newspaper accounts, excerpts from autobiographies, novels and short stories, songs and poems have been used. Greatest stress is placed on audio-visual media, however. Several transparencies, numerous tape recordings, more than a dozen filmstrips (ranging from programmed, self-testing strips to uncaptioned collections of photographs to filmstrip-tape presentations), picture cards, data sheets, a specially printed newspaper and a new type of resource map printed on translucent paper are among the materials included because if students are to feel another culture, that is, get inside it, they must do more than read about it. Getting inside African culture and finding out the "way it is" is the central object of this program of study.*

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*See Appendix C for a list of all instructional materials developed by Project Africa.

Resource Units for the Twelfth Grade

The second major group of materials designed by Project Africa staff and consultants were created for use in twelfth-grade courses. Although few schools today offer special courses on Africa, such courses are increasing in number. Many schools, however, do offer general courses in the "non-western" world, or in international relations or in other social science areas. Content about Africa south of the Sahara is frequently studied in some of these courses.

The original intent of Project Africa was to design a program of study dealing with contemporary Africa and built in accord with most of the guidelines used in the development of the 7-10th grade program of study. The great amount of time required to develop the latter program and several large reductions in budgeted funds made this impossible, however. Hence, we elected to prepare instead a number of units and materials that could be used as resources by teachers interested in including some study of Africa south of the Sahara in their senior social studies courses. Time and resources did not permit the Project to submit these materials to classroom trial but they were nevertheless placed in the public domain in the hopes that creative classroom teachers might find them useful and relevant.

Two of these materials were specially structured resource units. The first focused on traditional African religion. This unit was designed to deal with the problems of the relationship of the individual to the supernatural. Although content about African religion is used to a great extent provisions are made for applying the general learnings developed to an analysis of contemporary American perceptions of the same social phenomena. Specially this unit focuses on a variety of indigenous African religions and on the religion of the Yoruba of Nigeria in particular as it examines the functionality of religion within the context of a given social system as revealed by various forms of religious behavior. This is a sophisticated unit of study that is basically sociological in emphasis.

The second resource unit deals with urbanization in Africa. It is concerned primarily with urban life in Africa south of the Sahara, its evolution and basic features and how these compare to urban life in other parts of the world. Differences between traditional African village life and city life are examined in order to identify the reasons for the increasing rate of rural to urban migration in many parts of Africa and to examine the problems resulting from such migrations. Throughout this unit the major concern is with the individual, the problems that city life pose for him and the great variety of responses made to these problems. Again, the unit attempts to help students relate basic

learnings developed in its study to similar situations in which they are likely to find themselves.

Both resource units are structured in similar fashion. Each consists of an introductory essay describing a variety of ways to study the specific topic followed by an extensive, annotated topical bibliography of instructional materials useful in teaching such subjects to high school seniors. Each unit then concludes with a model teaching unit complete with daily lesson plans, student reading materials, study guides, and descriptions of and masters for audio and visual materials. These teaching units are built on an inquiry-teaching strategy, are conceptually-oriented and are multi-disciplinary in approach. They are not presented as finsished products but rather as resources from which teachers might extract materials or ideas for developing similar units of study for use by their own students in their own classrooms.

The final material designed for use in appropriate twelfth grade social studies courses is a data book on Africa. This volume contains written descriptions of a number of African nations followed by a wide variety of social, political, demographic, economic and other data displayed in a variety of forms--in pie graphs, bar graphs, line graphs, tables, charts, pictographs and maps. No lesson plans or activity guides are provided with this material, however. Rather, such a book is designed for use by teachers as a basic learning material in units designed to provide their students opportunities to <u>use</u> skills of inquiry developed in earlier units--to hypothesize about comtemporary Africa, test their hypotheses and develop valid generalizations and concepts. This data book is primarily a resource for student and teacher alike and its use will be limited only by their creative imaginations.

These three resources do not form a completed, specific program. Nor are they designed to be part of any existing course of study. They are, instead, strictly teacher resources--to be used as sources of ideas, information, materials and teaching strategies for use in local courses or units of study on Africa south of the Sahara or related topics. They have not been tested in classroom situations. But they were developed as one aspect of Project Africa's overall effort to improve instruction about Africa south of the Sahara in American secondary schools.

<u>Other Materials</u>

In the course of any effort to design new instructional materials it is quite likely that some materials designed can not be produced and others, while produced, need considerable revision before they can be used at all. Such was the case with some of the materials developed by Project Africa.

A number of materials designed by project staff and consultants proved either unworkable in their original condition, impractical in view of the project's limited resources or inappropriate to the programs being developed. Although project staff did research a number of units on various African peoples and did create the skeletal frameworks for a number of other new materials, none of these could be developed sufficiently for experimental classroom use or even for deposit in the public domain.

One material was developed well enough, however, so that eventhough it was not used in any of the programs described above it was placed in the public domain for use by any teacher interested in revising it. This was a 176-frame written program on the geography of Africa. This programmed text focuses on developing student concepts of climate and seasons through the use of data about Africa. It includes numerous diagrams, maps, charts and self-testing items. Never submitted to classroom try-out and in need of considerable revision before it can be used in a classroom this material has nevertheless been deposited in ERIC.

Summary

Project Africa devoted the majority of its resources to developing new materials and programs for use in teaching about Africa south of the Sahara in selected secondary grades, for without these materials there can be no meaningful improvement in teaching and learning about this region and its peoples.

Considerable basic research was undertaken by the project prior to the development of these materials, however, in order to devise guidelines for constructing the best, most useful materials possible. This research involved surveys of existing student perceptions and knowledge, available instructional materials, and expert opinion relative to teaching about Africa south of the Sahara.

Most of the materials developed by the project's staff and consultants were integrated into a scholarly, flexible, student centered program of study designed specifically for use in grades 7-10 where Africa south of the Sahara already is a subject of study. Additional materials in the form of resource units were devised for use in twelfth grade social studies courses. Some materials developed by the project but found not to fit either of these other two groups of materials were produced independently of all the others.

The instructional materials developed by Project Africa and deposited in the public domain are by no means polished, flawless materials. Many revisions need to be made in them before they can

be used profitably with any specific group of students in any specific curriculum. However, these materials do exist and are immediately available to any interested educators through the ERIC Document Reproduction System.* They are new materials, built on inquiry-teaching strategies and represent the best scholarship on Africa south of the Sahara.

*See Appendix C for ERIC code numbers and prices.

IV

FIELD TRIAL AND EVALUATION

Developing new instructional materials, whether they are on Africa south of the Sahara or on any other topic, involves more than creating prototypes and models of various types of materials. Ideally this developmental process also involves evaluating the new materials thus created in order to determine the accuracy of their content, the workability of the materials themselves and the degree to which these materials, when used in certain prescribed ways, facilitate the accomplishment of the cognitive and affective learning objectives which they are designed to help achieve. Conducting such evaluations was a second important type of research undertaken by Project Africa.

Although the project designed a wide range of materials for use throughout the secondary grades, our limited resources restricted comprehensive evaluation to only those materials comprising the sixteen-week program of study entitled Africa South of the Sahara: An Inquiry Program for Grades 7-10. This program as noted in the preceding chapter, consisted of a number of units of study, complete with student and teacher materials, for use in teaching about Africa south of the Sahara to average ability students. Its primary objectives were to help these students develop a more accurate understanding of the history and cultures of the peoples of Africa south of the Sahara while simultaneously developing and refining their own skills of intellectual inquiry. In 1969 Project Africa conducted extensive field trials with these materials in order to determine the extent to which they achieved these and other, more specific objectives.*

Pilot Evaluation

Many of the materials and techniques incorporated into Project Africa's 7-10th grade program of study were relatively new and untried in actual classroom situations. To test the workability of these materials and techniques--to determine whether or not students at these grade levels could use them successfully and to determine how much time was required to use them,to check the accuracy of their content and to try out the general structure of the proposed program itself, a pilot trial and evaluation of selected materials was conducted prior to the more formal field trials. This pilot evaluation was conducted during Spring 1968.

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* The complete technical report - Evaluation of Africa South of the Sahara: An Inquiry Program for Grades 7-10 - is available from the ERIC Document Reproduction Service. See Appendix B.

University specialists on Africa, classroom teachers and students participated in this pilot evaluation. Classroom sets of a preliminary version of Africa South of the Sahara: An Inquiry Program for Grades 7-10 were used by each of eight experienced classroom teachers for approximately fifteen-weeks with one of their regular world geography or world history classes. These classes, in total, represented all ability levels of students, a variety of grade levels, and different types of schools as well (see Figure 4). In addition, two classes were composed exclusively of black students, two were almost evenly mixed racially, one was composed primarily of Spanish-speaking Americans and three were exclusively white. Teachers of various ethnic and racial backgrounds taught these students. Some of these teachers had considerable training in African studies and others had none; some had participated in the preparation of the project's materials and others had had no prior knowledge about them. Schools in five states--Georgia, Ohio, Illinois, Arizona and Minnesota--participated in this pilot study.

Figure 4 Pilot Evaluation Classes

Grade Level	Ability Level	School Type
7	low	inner city
7	average	urban
7	honors	suburban
8	average	suburban
9	average	rural
10	low	inner city
10	average	inner city
10	average	urban

Both teachers and their students carefully evaluated the program as it was used in their classes. Students completed written evaluations of each weekly unit as well as a final summary-type of evaluation. Classroom teachers kept detailed daily records of how the specific activities worked with their classes. They made special notes of material or techniques which were completely unworkable and of those which worked especially well. At the end of each unit they also completed a general evaluative summary and returned it to the project.

Six university African studies specialists--in anthropology, economics, geography, history, international relations and political science--also evaluated this preliminary version of the program. They examined the teacher and student materials primarily

to check the accuracy of the content, considering both the broad scope of the materials and the specifics of each material. Where necessary, these scholars made corrections or suggested sources that were more pertinent or more clear and concise. Summaries of their evaluations were returned to the project.

During May 1968 a two day conference was held to analyse the results of this pilot evaluation. The project staff, African studies specialists and classroom teachers who had used the experiemntal materials met together and discussed both the overall effectiveness of the course and the relative merits of each specific part of the program. The results of the conference pointed to many changes that needed to be made in the materials. Generally the reading level was too high--this was especially true of the section on history. The visual materials, primarily filmstrips, were useful, but there was a need for more of this type of material. More variety was needed in the teaching strategy itself--the inquiry strategy was effective but the format needed to be varied to keep it from becoming repetitious. In addition to these general comments, the scholars made numerous specific recommendations for changes in the content of the materials.

The results of this evaluation thus provided specific guidelines for preparation of a complete and potentially workable program of study on Africa south of the Sahara for use by average ability students in grades 7-10, a program that was prepared in the months that followed. These results also suggested modifications in the originally proposed formal field trial evaluations, the design for which was also developed during subsequent months.

Purposes of the Formal Evaluation

A formal, controlled field trial and evaluation of Project Africa's complete program of study, Africa South of the Sahara: An Inquiry Program for Grades 7-10, was conducted in schools throughout the United States during the Spring 1969 semester. This evaluation was designed to determine how well the project materials accomplished the objectives set for them.

The overall objectives which served as guidelines for the development of the project's program were that this program, must, among other things:

1. Provide an accurate and well-blaanced perspective on Africa south of the Sahara;

2. Be so structured that teachers without special preparation could find them workable with average-ability students.

3. Result in a learning experience that is enjoyable to both teachers and students;

4. Make a positive contribution to the cognitive and affective learning of students who study the program.

Eventhough "facts" about Africa were used in this program as vehicles to develop other types of learning, the information that was included had to be accurate and as up-to-date as possible. Surveys of commercially available instructional materials had shown them to be unbalanced, inaccurate, and grossly out of date. Project Africa materials were designed to avoid these flaws. In order to get the desired balance, it was also necessary to take a multi-disciplinary look at Africa, since no one discipline could provide a total perspective. Therefore, it was necessary to determine if the content of the Project materials did, in fact, present an accurate view of Africa, past and present, from the perspective of history and the various social sciences.

Most social studies teachers have a very limited academic background in African studies. Most of them are likewise only vaguely acquainted with a strategy of inquiry-teaching. Therefore, in order to be useful, an inquiry oriented program of study on Africa had to be so well structured that teachers without special preparation could make it work in the typical classroom. This meant that the materials had to be clear and complete and that the accompanying teaching strategies must have a concise, straight-forward, step-by-step format.

An underlying assumption made by the Project Africa staff was that learning can and should be "fun." Students should enjoy the activities in which they are required to take part and teachers should enjoy working with students in these learning activities. This assumption is based partly on humanitarian grounds and partly on the experience of finding that more and better learning takes place when the learning situation is enjoyable.

The crucial test which any curriculum material must pass is the demonstrable effect that it has on student learning. General cognitive and affective objectives had been set for the Project Africa materials and the formal evaluation was designed to assess how well they had been achieved. These objectives included knowledge about Africa south of the Sahara, skills of intellectual inquiry, and attitudes toward the content of the program and toward the learning situation. Specifically, the questions asked in this evaluation were:

1. Is the content of the program accurate, well-balanced and up-to-date?

2. Can teachers who have not had special preparation use these materials successfully?

3. Do students and teachers find the program enjoyable?

4. Does the program result in students learning knowledge about Africa?

5. Do students who use this program increase their skills of intellectual inquiry?

6. Does this program result in students developing more positive attitudes toward Africa?

7. Do students who use this program develop more positive attitudes toward school in general and social studies in particular?

There were two other aspects to this evaluation, too. First, in addition to evaluating the project materials themselves to determine whether they met these prescribed objectives, the materials were also compared with programs of study that were currently being used in social studies classrooms because implicit in the project rationale was the notion that these materials would not only meet the objectives set for them, but that they would meet them better than existing courses of study.

And second, it was important to determine what, if any, effect certain variables might have on the outcomes of the use of this program. It was felt that with certain types of students or in certain circumstances the program might be more successful than in others. Therefore, the effects of the following variables were also evaluated:

Sex - Sex is often found to be a significant cause of variance in achievement among students of this age group.

Race - Because of the subject matter of this course of study, it was felt that black students might find study of this program more relevant than would white students, and that consequently the program might prove more successful among blacks.

Grade Level - Content and teaching strategies that are too sophisticated for seventh grade students may prove very successful with tenth graders. Since this program was designed to span grades seven through ten, it seemed important to de-

termine whether it worked equally well with all grade levels.

Intelligence - There is a strong feeling among classroom teachers that "inquiry teaching" may be successful with bright students, but that it may not work well with average students.

Procedures

There were two phases to the formal evaluation. The first phase was an evaluation of the Project materials by university specialists in African studies. The second phase was a field-test of the materials in social studies classrooms in various parts of the United States.

Scholar Evaluations: Four academic specialists were asked to examine and critique the materials finally included in the Project's program of study. These scholars were:

Professor Graham W. Irwin
Professor of African History
Columbia University

Professor James Vaughan, Jr.,
Chairman, Department of Anthropology
Indiana University

Professor Anthony Kirk-Greene
St. Anthony's College
Oxford University

Professor Burton Witthuhn
Department of Geography
The Ohio State University

Although each of these evaluators was thoroughly familiar with the Project's complete program of study, three of them were asked only to comment on those aspects most closely related to their own fields of specialization--whether they be African history, geography or anthropology. Only one specialist, Professor Witthuhn, examined the complete program. Each of the specialists prepared a critique of the materials examined in the form of extensive annotations in the materials themselves and a written summary of his general observations and conclusions.

Classroom Evaluations: Eighteen teachers of secondary school social studies each taught this program of study to one regularly scheduled class during the Spring 1969 semester. In each instance these classes were those in which the students would normally have studied content about Africa south of the Sahara in their own particular schools, and the students themselves were classified as average by their own schools. Four of these classes consisted of seventh-graders, seven were at the ninth grade level, five were tenth grade and two were some combination of sophomores and juniors. These classes consitituted our Experimental Group.

The schools in which these classes were conducted were scattered throughout the United States. Four were in the Far West, four in the Midwest, three in the South and seven in the Northeast. Of the total number, three may be classifid as rural and seven as suburban. Five schools were located in urban areas and three others were ghetto schools.

The experimenting teachers varied greatly in their content preparation on Africa as well as in their normal teaching styles and experience. All but three were described as innovative teachers by their supervisors. Ten had spent only three or less years teaching a course which included anything on Africa while seven had been teaching such a course from four to six years and one for ten years. Four had participated in short summer or in-service institutes on Africa while seven had taken from three to twelve credit hours of college or university courses on Africa. Three of these same seven had also spent some time living or traveling in Africa. Most, however, had never had any formal preparation on or study about Africa south of the Sahara. Furthermore, none indicated any special preparation on inquiry-teaching.

Since the intent of the try-out was to determine the effectiveness of these materials when used by teachers uninstructed in their use, no special training in the use of the program materials was provided. The only aid given these experimenters was in the form of the teachers' guides which contained the content and methodological rationales for this program, detailed daily lesson plans, and some explanatory information. The teachers were instructed to teach the program as directed in these guides making as few deviations from them as possible.

Eighteen additional teachers took part in this evaluation as controls. These teachers taught the course of study about Africa normally taught in their schools. The students in these eighteen classes made up Control Group One; in all cases these students were of the same grade level and same general ability as those in the experimental group. Both groups had studied the same social studies program up to the beginning of the field trials.

Four other teachers experimented with these materials. They were different from the teachers in the other two groups in that they had more knowledge about Africa. In addition, they had an intellectual and emotional commitment to Africa--they had consciously chosen Africa as an area of special interest. Finally, and for this research most important, they were quite familiar with the Project materials. For six weeks during the summer of 1968 they had been members of the Project Africa staff working to develop the experimental version of the course. One of them had also been part of the staff the previous summer and had taught a preliminary version of the program during the spring of

1968. Consequently, these teachers knew the objectives of the program as well as how it was designed to be taught. One of these teachers used this experimental program in a class of advanced seventh graders; another in a class of seventh graders classified as "slow learners," another in a class of advanced eighth graders; and the fourth in a class of freshmen and sophomores. These classes comprised Control Group Two.

The schools cooperating in this research were specifically instructed to provide experimental and control classes which were of average intellectual ability. As a check, the Otis Quick-Scoring Mental Abilities Test, Form J, was administered to all experimental classes and to the Control Group Two classes. The results suggest that the experimental classes are in the average to above average range. Control Group Two included two above average classes and one far below average. The mean I.Q. for the Experimental Group was 104. The mean for Control Group Two students was 106.

Throughout the fifteen week experimental period, the Experimental Group and the Control Group Two classes studied exclusively about Africa. Control Group One classes spent varying amounts of time studying Africa and then went on to study the next topic in their regular syllabi.

Two methods were used to obtain teacher evaluations of and reactions to the program materials. First, each teacher in the experimental group was requested to make daily notes of whatever problems, errors, significant pupil reactions or especially successful aspects occurred in each daily learning activity or with each piece of learning material. These were written in appropriate places in the teaching guides which were later returned to the Project for analysis.

Each teacher also completed an open-ended reactionnaire and evaluation form at the conclusion of each major subdivision of the program--Introduction, Topic I, Topic II and Topic III. These forms asked the teachers to note what they liked least and most about each Topic, comment in detail on each daily lesson and on each piece of learning material used in the program, and to indicate the strengths and weaknesses of all components of the complete program.

Each student who participated in the testing of Africa South of the Sahara was asked to complete a confidential questionnaire. This questionnaire was designed to collect information about the attitudes and impressions that students developed as a result of this experience and about the way students reacted to specific parts of the program.

Evaluation of the cognitive learning resulting from the study of this program was done by tests administered to the stu-

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dents as well as by analyzing the responses of teachers and students to the questionnaires. Due to the impossibility of randomly assigning students to treatment groups, it was necessary to use a pretest-posttest design. All experimental and control classes took the test instruments before beginning their studies of Africa and again at the conclusion of these studies, approximately sixteen weeks later.

Knowledge about Africa was measured by an instrument developed by the staff of Project Africa. This instrument, Africa Knowledge Test, was a 48-item multiple choice test made up of subtests of twelve items each:

Subtest One - Knowledge of physical geography.

Subtest Two - Knowledge of history before the Colonial Period.

Subtest Three - Knowledge of indigenous culture and society.

Subtest Four - Knowledge of colonial and current history.

Most of the items in this instrument were taken from an instrument used by Project Africa in a 1967 nationwide survey of what secondary school students knew about Africa. Therefore, data from approximately 1500 students was available for each of these items. Two forms of this Africa Knowledge Test were devised. Both forms contained identical questions. The Kuder-Richardson reliability for the Africa Knowledge Test was .73 for the pretest and .88 for the posttest.

The 1967 Project Africa survey identified five examples of stereotyped misinformation held by American secondary school students. Items representing these stereotypes were included in the subtests of our knowledge test in order to secure some measure of the extent to which Africa South of the Sahara: An Inquiry Program for Grades 7-10 might result in a reduction of specific, widely held misconceptions.

Inquiry skills were measured by two instruments. The first, Inquiry Skills Test, was developed by the Project Africa staff to to assess those specific skills of reflective inquiry that this curriculum program had been designed to improve. The basic instructional model for the program was one that has been described many times, in slightly varying forms, since John Dewey explicated it in How We Think (1910). The model involves skills of:

1. Defining a problem
2. Developing an hypothesis
3. Testing the hypothesis

4. Drawing a conclusion

These skills were further specified and stated in terms of the Taxonomy of Educational Objectives. Items were written to correspond to each of the steps in this model and twelve of the items were selected for the test instrument. The Inquiry Skills Test was administered directly following the Africa Knowledge Test as a fifth twelve-item subtest.

The test of knowledge and the test of inquiry skills were combined into one instrument, Africa Achievement Test, for administration and scoring. This combined instrument reflects overall achievement on the cognitive objectives of Africa South of the Sahara.

Because of the weaknesses inherent in a non-standardized measure of anything as complex as intellectual skills, we decided to administer a standardized test as well. The Watson-Glaser Critical Thinking Appraisal, forms YM and ZM, was chosen.. While it was not expected that the scores on the total instrument would reflect small changes in the specific inquiry skills Africa south of the Sahara was designed to increase, it was hoped that scores on some of the separate subtests might.

The affective outcomes of the program were assessed by analyzing teacher responses for descriptions of changes in their students and by looking at the responses of the students themselves. In addition, a semantic differential instrument, Africa Attitudes Survey, was administered to all groups at the conclusion of the study. Nine concepts were included in the instrument. Two of these, SCHOOL and LEARNING, related to a general attitude toward school. Four others, SOCIAL STUDIES, TEACHER, HOMEWORK, and MAPS-FILMSTRIPS-READINGS, related more directly to the social studies classroom. The final three, AFRICA, ASIA, and SOUTH AMERICA, related to attitudes toward three parts of the "non-western" world. While this study was primarily concerned with changes in attitude toward Africa, the other two items were included to provide benchmarks for comparison. Each of these nine concepts was described by seven pairs of adjectives selected from Osgood's list of evaluative adjective pairs.

Results of the Evaluation

Scholar Evaluations: The African studies specialists who evaluated the project materials primarily concerned themselves with substantive content, although they raised some questions and offered some suggestions about presentation and teaching techniques. Most of their comments regarding the substance of the program materials reflected the essential concerns of their parent disciplines. Hence, the geographer paid special attention to spatial relationships, the historian to concepts relating to change

through time and the anthropologists to concepts relating to social organization and interaction as well as to evidences of ethnocentrism. All noted and corrected occasional factual errors as well as several possibly erroneous impressions that could have been created by the selection and presentation of certain content. These specialists also commented on methodological aspects of their specialties as reflected in the project materials--including the heuristic value of maps and tables, rules of evidence, techniques of anaylsis and other skills. And, finally, they did make some judgments about various instructional techniques used throughout the program.

The evaluative comments made by these specialists were quite precise and, in most instances, in considerable detail.* In sum, however, it can be said that their general reactions were quite favorable. Certain materials--such as the outline maps reproduced on translucent paper, data cards, film strips and other visual material--and the learning activities of which they were a part received almost unanimous approval.

Some evaluative comments were made, however, that related directly to the substance and methodology of the various major Topics of the program itself. The technique of comparing Africa to the rest of the world used in the introductory unit, for example, was questioned because of the possible misinterpretations to which such comparisons typically lead. In Topic I, misuse of certain specific terms (such as "polygamy--the correct term is polygyny") was pointed out and certain generalizations were qualified to reflect current knowledge more accurately--as when the statement that "Most Hausa, still today, live and think as their fathers and grandfathers before them," was rewritten by one evaluator to indicate that the Hausa are moving into the 20th century, while holding on as tightly as they can to the life that they know and respect. Comments on methodology generally reflected a concern that students were sometimes asked to make inferences from insufficient data.

Topic II of this program focused on the history of Africa south of the Sahara. More "factual" errors were detected in this section than in any other. This may be because so much of African history is still uncertain or because there was more written material in this section than in the others and therefore more opportunity to make errors of fact. Most criticism, again, was of over-generalization and the use of vague rather than specific terms. In all cases these scholars corrected errors by adding qualifiers or by substituting one term for another. But broader, substantive flaws were identified as well--such as a rather unclear description of African slavery and the nature of the Arab and Atlantic slave trades, an overemphasis on the importance of the East African-Chinese trade, and a description of Africa's reaction to European colonial policy that might well lead students to under-

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*See the complete technical report referred to in Appendix B for these detailed analyses and all other evaluative data collected in this field trial.

estimate the magnitude and nature of the African resistance.

Though methodological comments regarding this Topic were few in number, they tended to center on one basic theme. This was a general reluctance on the part of some evaluators to permit students to come to conclusions on their own and on the basis of limited evidence. There was some feeling that students might as well be told things of which scholars are reasonably certain, and that conjecture should be reserved for topics about which specialists are still unsure.

Evaluations of the final topic, Changing Africa, dealt not so much with specifics as with the usefulness of some of the activities and the validity of some of the conclusions toward which these pointed. The following comment reflects this type of criticism:

> In general, I find the tone of (the introduction to Topic III) too dramatic--too unaware of the African tradition of urbanism (Hausa, et. al.). Not that it is the same tradition as that of the West, but that tradition makes urbanization in Africa different from urbanization in other parts of the world.

Suggestions were also made regarding the ways in which several points might be made more strongly and regarding points that ought to have been made but were not.

Teacher Evaluations: Teacher reactions and evaluation were gleaned from the questionnaires and annotated teaching guides submitted by the teachers in the Experimental Group and Control Group Two. As was expected, these reactions ran the entire spectrum from occasional frustration to hearty endorsement and approval. Detailed analyses of these reactions to each piece of program material and each learning experience, however, provided a most useful insight not only to the strengths and weaknesses of the program but also to the feelings of teachers involved, in most cases for the first time, in inquiry-teaching. Some of the more significant of these general reactions are summarized here.

The teachers, in general, liked the introduction to the program and its focus on geography. The use of several filmstrips and student maps enthused them and their students--as one evaluator noted "At this point in the study, the students appear to be very excited about it. The period passes quickly for them." Each of the subsequent in-depth studies of African peoples, history and contemporary change, however, was frequently felt to be too long and repetitious. "Students began to lose interest by the time the last culture group was studied." was a common observation regarding Topic I. The heavy emphasis on reading

assignments in Topic II received considerable criticism--as did the amount of attention--four days--devoted to the study of early African kindgoms and empires. And teacher reactions to the contents of Topic III was quite mixed, indeed, with some teachers declaring the topics of education, work patterns and city life to be "very relevant to current American problems" and thus most interesting while others felt these same subjects "had no meaning" for their students.

There was less of a range of opinion regarding the teaching guides accompanying each topic. Virtually every teacher responded favorably to the structure of the daily lesson plans, a structure that listed in one column key teacher questions and in a second column the kinds of responses students should be expected to make. Of course, some teachers misinterpreted these suggested student responses as being the correct answers and apparently became quite discouraged when their students did not answer in precisely the words used in the daily plans, but in general the teachers seem to have found this format quite useful as a guide to teaching. One evaluator, referring to this format, labeled it "excellent," saying that "I am adopting it for my own use. It leaves little to guess work and I'm sure a substitute teacher could fit into the program with a minimum of effort using this format!"

Another feature of the teaching guides for each topic was the background information provided for the teacher. Although the information provided on each Topic was felt to be "generally adequate" there were a number of requests made for "more information on Africa" in all the guides. Some teachers wanted answers for the student study guides, a few requested pronunciation keys and a glossary of unfamiliar terms, several wanted captions for the filmstrips, and occasionally there was a request for a bibliography on a specific event, people or topic. These requests reflected to some degree the initial malaise on the part of most teachers when confronted with inquiry-teaching for the first time, for as one complained; "I feel insecure--afraid that something is missing or that I am not seeing certain points." The problem was stated in a different way by another evaluator who saw it as a paradox: "We are supposedly not to tell our students anything.... If this is so, how are we to get this information across to students?" One teacher, however, seemed to realize the different role required of the teacher in an inquiry-oriented classroom when she wrote: "The more information I have as a teacher and a person, the more I desire to turn my students into experts. Perhaps you are better off, project-wise, not to add more material."

Teacher reaction to various program materials also varied; some materials proved useful with certain grade levels and not others, while other materials either were failures at all levels or moderately successful at each. A number of materials and

activities were particularly well received, however.

One set of materials consisted of ten African maps printed on special translucent paper. Pairs of students used these maps in an independent study situation to hypothesize about why African peoples live where they do. Judging from teacher responses this activity and these maps met an enthusiastic response. The most frequently offered explanations for this response mentioned two things--the manipulative nature of the maps themselves (the students enjoyed working with them) and the opportunity to work with a partner. "Students liked being able to check one another." and "The students found security in working with others." were frequent comments. Other factors mentioned were friendships, chance for self-expression, a "relaxed" class, and that "some students enjoyed being the searcher."

However, one teacher noted that while her students enjoyed the activity, it was "for the wrong reasons." She thought that the weaker students found it a good opportunity to copy from the stronger. Where problems arose, it was usually noted that they were caused either by a "shortage of time" or by "the academic backgrcund of the students." The most negative response stated that "...most of these students have been used to more guidance."

One evaluator, whose reaction to the introductory topic was generally critical, offered the following comments:

> I mentioned the fact that in the initial lessons the slower students were very impressed. They felt they had learned a lot with a minimum of effort. The "better" student, seemed bored.... The types of children who succeeded proved interesting. I checked their folders and found this:
>
> Student #1 - has a high IQ but has been doing only "C" work.
>
> Student #2 - has ability but has been one step away from failure all year--rarely contributes to class discussions.
>
> Student #3 - an "average" student who makes a great effort but is very unsure of himself--he stays after class every day to tell me how much he likes this study.
>
> Student #4 - failed social studies last quarter--almost failed the first quarter. Will do nothing which involves much reading

> or writing although he does not have any marked reading problem. He did a superb job on this--has contributed a great deal in class recently--I have never been sure what he could do....

Another material well received by teachers and students was an excerpt from a Hausa dictionary which students analysed to hypothesize about the nature of Hausa society. This appears to have been part of a unique learning experience for many. "We were surprised!" and "It opened up a whole new area of awareness." were representative comments. Evaluators reported that students were highly interested and the objectives for the activity were reached. This item of learning material seemed to be most successful with the ninth and tenth grade students. Only one evaluator reported that his ninth grade students "seemed puzzled" by the activity. Evaluators with seventh grade classes reported some difficulty though their students "seemed to get the idea." A class composed of Mexican-American students also encountered some difficulty "due to the language barrier" and an eleventh grade high-ability class thought that "the words had been too carefully chosen."

The item of learning material in Topic II that generated the most favorable response from teachers was the newspaper African World. "We spent more time with this than anything else." and "Dramatic--history made interesting." were two fairly typical reactions. However, the success of the newspaper did not deter teachers from suggesting improvements. More recent news (three teachers), more issues, a cartoon and "something of interest to young people" were suggested. A seventh grade class apparently thought the paper came from Africa, and a teacher of a tenth grade class reported that her students felt "tricked--it wasn't authentic." The paper was considered successful by teachers at all grade levels of the testing sample.

A highly successful learning material in Topic III was a set of readings entitled Changing Africa. Evaluators at all grade levels reported it effective. "The newspaper ads created great interest." "Students drew many inferences." were sample reactions. The "Tell Me Josephine" feature was also "a hit!" Evaluators noted the variety of readings, the subject matter (many features focused on individuals) and the novelty of the excerpts from African newspapers as being effective elements of the activity.

Another reading that was interesting and enjoyable to students was "A Uganda Schoolboy Tells His Story." Teachers reported that their students were "able to relate well to the story" (seventh grade) and that "It seemed authentic--the students wanted this source." One evaluator noted that her students "could understand

their own education much more after this." and another added that the reading "sparked an interesting analysis of the options open to the boy." These comments suggest that the reading might be useful in a value clarification activity. Similar reactions were generated by the reading "Lullabies and a Cracked Slate." Students were "pleased" (seventh grade) and "astonished" (tenth grade)." "The students wanted to compare methods and purposes of education." reported one ninth grade teacher, and another ninth grade teacher commented that, "This activity generated the most discussion of all. The students were very outspoken about their own families and upbringing." The same teacher reported that her students were drawn toward the folk society depicted in "Lullabies."

Perhaps the most successful items of learning material in Topic III, however, were the transparencies, "Extended Family" and "Nucleur Family." Favorable teacher response seems to have been prompted by the "clarity it gave to a difficult topic." Another teacher thought that the transparencies were "easy to build on." Teachers commented that students at each grade level found the material both interesting and understandable.

Sets of picture cards, a tape-slide presentation about The K'allu of the Mech'a Galla, a number of filmstrips and transparencies, and a recorded interview with Peter the Woodcarver also received good evaluations. But other materials seemed less effective. A timeline used in Topic II, for instance, was felt to be rather complex and the reading assignment associated with it too difficult, especially for seventh graders. Yet one teacher thought the activity was "Great. Compels students to do research."

Other materials fared even less well. A filmstrip on African climates, though felt to be superior by a specialist in geography, was criticised as being too long, and the distinctions between climate regions as being too indistinct. A data card type of material was criticised as being too difficult and cumbersome. One teacher thought that it was "dangerous to generalize from only four countries." The vocabulary was too difficult for seventh graders, and the "contrasts before and after (independence) were too obvious." A number of student study guides, some material on voluntary associations and proverbs were also felt to be failures by some teachers. An exercise in which students explored some statements found in history books was also considered impractical by at least one teacher who went on to observe, "This exercise can make students distrustful of written history."

A variety of teaching techniques were employed in the teaching strategy used in this program and these techniques met with mixed reactions on the part of the teachers. The consensus of the evaluators was that grouping was the most useful technique, with pairing frequently mentioned as being particularly successful.

One evaluator thought that "Students could discuss the material in small groups without fear of being contradicted." Several evaluators were of the opinion that many students lack self-confidence and that, "the only time they contribute to the class is when they are in small groups or paired." Another evaluator preferred pairing because, "Two do more work than a group."

Four evaluators thought that techniques that involved homework were least useful. "Discussions didn't go well as students weren't prepared." and "The individual study guides would not be completed by the students because they prefer to talk over an answer before writing it down." were representative reasons offered by evaluators for this weakness. In addition, pairing was disliked by two, one who felt that "one student tends to dominate" and the other who observed that "the slower students form a grcup in the corner and do nothing."

The completed technical evaluation report analyses these evaluations in considerable detail. However, in sum most of the experimenting teachers reported reactions to the program that can be described as ranging from approval to enthusiastic. Only two were highly critical of the program--one, a teacher of eleventh grade academically advanced students, and the other a very traditional, ninth grade teacher.

However, all evaluators experienced certain degrees of difficulty in launching the program. The project materials and strategies required teachers to assume the role of a co-partner in inquiry rather than that of authority figures dispensing knowledge. Responses in the evaluation forms suggest that many teachers and students found themselves in a new and highly uncomfortable situation. Typical teacher reactions initially stressed difficulty in following the suggested strategies in the teaching guides and "problems with the time factor."

The structured teaching strategies in Africa South of the Sahara were greatly resented by some of the teachers. Such structuring was, of course, necessitated by the need to test the use of specific techniques and strategies as well as materials. But in spite of the fact that pleas for flexibility were a ubiquitous feature of the evaluations, approval of the program as a whole was widespread. One teacher, for example, after noting that "the project is a ravenous consumer of time and energy," reported:

> My students have had numerous valuable experiences with the project. Three of particular significance are: stating and working with hypotheses, cooperating in groups and in pairs, and in finding common bonds for the whole of humanity.

Another teacher summed up his evaluation by noting the impact of this program on his class of Mexican-American students:

> I cannot emphasize enough the outstanding response that was achieved for these students. The interest was high nearly from the beginning and remained high throughout the entire course. The students carried their enthusiasm over into other classes and...other instructors have commented upon their change in attitude.... At the time the class was selected, it was a very mediocre group. They were the second poorest of my four classes and during the early part of the course, the hardest thing I had to cope with was their inability to express themselves. Somewhere that changed and when it did, their grades climbed.... At the end of the year, the students were considered to be above average....
>
> The inquiry method of instruction used in this project has resulted in some amazing changes.... Through the inquiry method, they have been forced into thinking and analyzing materials. Observers in the class have been consistently amazed at the amount of response the class produces. Today, they have much more confidence in themselves, are more interested in school, and in general have developed far more than many of our educators believed that the Latin-American student ever could.

A ninth grade teacher whose class consisted primarily of "problem learners"--poor readers, discipline problems and repeaters--volunteered on his final evaluation:

> Project Africa is proving that social studies can be interesting and even fun for students of low average abilities and reading skills. Furthermore, these same students are <u>really</u> learning both skills of inquiry and knowledge of Africa.... Students made excellent growth in knowledge, skills and self-esteem, all three of which are only fully appreciated if one knows these students. One of the most impressive things about this program is the fact that slow readers and low motivated students can be reached with this material and yet it is still very useful for the more able student. True, it maybe won't reach both <u>extremes</u>, but it comes closer than anything we have seen yet.

The two evaluators who disliked the program did not submit any general comments similar to these, but rather confined themselves to comments on specific points as noted above. Even those who did react favorably to the materials and strategies in general were most candid in their comments and criticism of specific items or activities--their approval was by no means totally uncritical or one of blind enthusiasm for anything new or different.

Student Evaluations: Although over seven hundred students participated in the field trials of Project Africa's program of study, evaluations from only 240 of them were selected for detailed analysis. This sample consisted of two classes at each of four different grade levels, selected according to the degree to which the teachers felt comfortable with inquiry, teacher knowledge about Africa and general ability level of the students in the class itself. Although these student responses tended to be highly impressionistic and frequently bore little relationship to the questions being asked, certain patterned responses did emerge. Nearly all of the students in the sample, for instance, did list something about the program they considered to be "most worthwhile." These items can be classified as:

Content - A majority of the students identified some item of content as being "most worthwhile." Such responses as, "the way other people live," "changing Africa" and "The history--I didn't know anything about it before." were placed in this category.

Stereotypes - This response actually refers to a form of content, but it was sufficiently specific to be a separate category. "I thought that all Africans were cannibals." is an example of one of the grosser responses. More typical is, "I realize now that they have modern cities just like us." where specific content is tied in with a previous misconception.

Inquiry Skills - A significant number of students voiced the attitude that how a subject was learned was perhaps of more lasting value than what was learned. An enthusiastic student wrote, "I think that in the future when it comes time to vote I'll be able to look into more than one source before making a decision, and I will probably make a much wiser decision. Not just for voting, but for every decision I make in life."

Another student thought "The form of teaching was most important. Facts were unimportant. Whenever facts are pounded into your ear, they are forgotten, but in this course we learned logical reasoning." A tenth grade optimist thought, "It is part of a revoultion in education. We are going from being told to thinking."

Inquiry Classroom - The distinction between this category and the preceding one is found in what students felt while engaging in inquiry. "I liked when you give your opinion and then back it up because you are being heard...and receiving the feeling of accomplishments." is the way one seventh grader expressed it.

Attitudes - Many students expanded on their awareness of the misleading stereotype of Africa and indicated changes in attitudes. "I changed my feelings toward Africans and Negroes." one tenth grader reported, and an eleventh grader thought that the most important thing he had learned was, "You can't judge people by their skin."

Parts of the program which some students saw as being "most worthwhile," other students saw as being "least worthwhile." In addition, some aspects of the program received quite negative responses. These responses can be categorized as follows:

Content The most frequent category of response referred to broad areas of content: "History--who needs it?" and "Peoples, we will never need to know this." are examples of non-specific areas of content as being listed as least worthwhile. "Zimbabwe wasn't typical." was a complaint of one student, who felt perhaps that the content was loaded in favor of a particular point of view, and the comment that, "The study of events and people is more important than the study of climate." is an example of a frequently articulated feeling that content should be relevant to students' perceived needs and interests.

Inquiry Methods It is an inescapable fact that some students do not at least initially, respond sympathetically to the use of inquiry strategies in the social studies classroom. "We never had the answer." and "...making an hypothesis and then reviewing it two

or three times," reflect two kinds of student complaints. As one eleventh grade student expressed it: "There was a lack of anything solid.... I want KNOWLEDGE (student emphasis), not vague impressions and lessons in analysis."

Homework Some students, predictably, didn't like the homework. The list of specific complaints included the reading assignments ("dragged out") and the "4,000 worksheets." A ninth grader voicing the usual student reactions against homework, was sensitive enough to add the reassuring qualification, "Don't worry. I never did it."

"Too Difficult" There were relatively few complaints about the difficulty of the materials. Seventh grade students were quite frank: "Some of the activity sheets I didn't understand." and "I didn't understand the Hausa." One eleventh grade student found the arithematic on one study guide too difficult.

"Boring" and "Repetitious" The repetitious nature and comparative ease of some of the assignments and activities bothered some of the older students. "Its so easy a second or third grader could do it." and "We dragged through the materials much more slowly than was necessary." are comments from this group. Others were more specific: "Changing Africa--it was boring." and "The section on civilizations was repetitious." No reactions within this category were noted by students in the seventh grade sample; the number of students who found things boring or repetitious increased in direct proportion to the grade level.

Responses in the "most worthwhile" category show no great variation by grade level. As expected, the older students tended to be slightly more content-oriented, and the eleventh graders seemed to be more aware of changes in their attitudes. Yet, these differences can be as easily ascribed to the professional orientations of the teachers, to prior learning or to a host of other variables as they can to studying Africa South of the Sahara. There is the temptation to conclude that as students become older and more "programmed" by conventional teaching strategies they become less susceptable to inquiry-teaching, but the sample is too small and the data too "soft" to warrant any such assumptions. The ninth grade sample shows that these students were more aware of the importance of inquiry skills and conscious of their changed attitudes than students in the other classes. This may be largely attributed to the effect on the sample of one

experienced teacher working with a class of problem learners. Other methods of instruction had failed with this class and they seemed to welcome a learning situation that was more "open-ended" and free of conventional text-book assignments. This group and a class of eleventh grade Mexican-Americans expressed the warmest acceptance of the Project Africa materials of all groups within the sample.

Judging from the responses to the "least worthwhile" category, older students tended to be more critical of the content than the younger students, though it is suspected that the ability of the older students to articulate their complaints may be partially responsible for the statistical imbalance. Tenth and eleventh grade students tended with more frequency to find the materials "boring" and "repetitious," although the majority of these responses came from a class of academically talented students taught by a "non-inquiry oriented" teacher.

Students were generally enthusiastic about their learning experiences with Africa South of the Sahara. Only two students in the sample were frankly critical of the entire program, and several students indicated that they had to look hard for something to criticize ("The tapes--this was the only thing I could find fault with."). That significant numbers of students identified the practice of inquiry skills, changed attitudes and perceptions about Africa as the "most worthwhile thing" they got from this program is a fair indication that some of its major objectives may have been met.

Tests of Cognitive Learning: The results of the battery of tests administered to the experimental and control groups of students provided further evaluative data about Africa South of the Sahara: An Inquiry Program for Grades 7-10. The basic unit of analysis for these data was the school-sex-race group.

Where both pretests and posttests had been administered, the pretest scores were analyzed by analysis of variance between the experimental and control groups to determine if the groups were, in fact, similar before the treatment. The posttest scores were then analyzed by analysis of covariance between the experimental and control groups using the pretest scores as the covariate. For the Africa Attitudes Survey which was administered as a posttest only, the results were analyzed by analysis of variance between the experimental males and females and between experimental blacks and whites.*

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*Complete tabular descriptions of the results of these analyses may be found in the technical report of the evaluation noted in Appendix B.

In order to determine if the study of Project Africa's program of study resulted in any significant increase in cognitive learning, the posttest scores of the Experimental Group were compared with those of the control groups. No significant differences were found among any of the groups on the Watson-Glaser Critical Thinking Appraisal total score or on any of the subtests. However, on the Inquiry Skills Test, which had been designed to measure those specific skills of intellectual inquiry which the program had been developed to increase, significant differences were found for white males between the Experimental Group and Control Group One, as shown in Figure 5. The differences for all other students were found not to be statistically significant.

Figure 5 Pre- and Posttest Mean Scores for White Males on the Inquiry Skills Test

WHITE MALES	Experimental	Control	F	Sig.
Pretest mean scores	5.38	5.44	7.971	.01
Posttest mean scores	6.82	6.06		

Significant differences were also found on two of the four subtests of the Africa Achievement Test. These differences were present for both white males and white females. There was a significant difference on the subtest measuring knowledge of African history before the colonial period and on the subtest measuring knowledge of indigeneous culture and society (see Figures 6 and 7).

Figure 6 Pre- and Posttest Mean Scores for White Males and Females on Subtest Measuring Knowledge of African History Before the Colonial Period

WHITE MALES	Experimental	Control	F	Sig.
Pretest mean scores	2.56	2.71	13.900	.01
Posttest mean scores	5.49	4.07		
WHITE FEMALES				
Pretest mean scores	2.61	2.46	14.854	.01
Posttest mean scores	5.44	3.50		

Figure 7 Pre- and Posttest Mean Scores for White Males and Females on Subtest Measuring Knowledge of Indigeneous Culture and Society

WHITE MALES	Experimental	Control	F	Sig.
Pretest mean scores	4.74	4.79	20.038	.01
Posttest mean scores	7.29	5.86		
WHITE FEMALES				
Pretest mean scores	4.93	4.96	15.296	.01
Posttest mean scores	7.51	5.83		

There were no significant differences between the Experimental Group and the control group on the subtest measuring knowledge of physical geography; eventhough the students in the Experimental Group did score large gains on this subtest, these gains were no larger than the gains made by students taking their regular courses of study. On the subtest measuring knowledge of colonial and current history neither the Experimental Group nor the control group showed any significant increase. On both subtests, however, the mean scores of the students in the Experimental Group were as high or higher than those scores of the students in the control group.

On the total score of the Africa Achievement Test (four knowledge subtests and the subtest on inquiry skills combined) the differences between the Experimental Group and Control Group One were significant for both white males and white females (Figure 8).

Figure 8 Pre- and Posttest Mean Scores for White Males and Females on the Africa Achievement Test

WHITE MALES	Experimental	Control	F	Sig.
Pretest mean scores	21.99	22.21	12.029	.01
Posttest mean scores	32.63	29.06		
WHITE FEMALES				
Pretest mean scores	21.56	22.21	11.259	.01
Posttest mean scores	31.81	27.04		

To determine to what extent, if any, the study of Africa South of the Sahara had reduced common misconceptions about Africa the responses to specific items on the Africa Achievement Test were analysed. The misconceptions investigated included:

1. Large wild animals--such as lions, elephants, and giraffes--would more likely be found deep in the African jungles than roaming through African parks and game reserves.

2. Most of Africa south of the Sahara is covered by jungles rather than by grasslands.

3. Traditional religions of Africa south of the Sahara stress a belief in the necessity of human sacrifice to please the gods when they are angry rather than a belief in a Supreme Force or Being who created the universe.

4. Timbuctu was important for its diamond mines rather than for its university.

5. When European explorers first came to Africa they found no towns or cities, only small villages of huts, rather than many strong kingdoms.

The following Figure (Figure 9) shows the percentage of students holding various misconceptions as revealed in the 1967 survey, in the Experimental Group and in Control Group One. The pretest results from the experimental and control groups are similar to those from the 1967 survey. From the posttest results (Figure 9) it can be seen that a classroom study of Africa does reduce four of the five misconceptions. With misconceptions 1 and 5 Project Africa's program does not appear to be significantly more potent than the normal course of study, but for numbers 2 and 3 study of Africa South of the Sahara: An Inquiry Program for Grades 7-10 shows a significantly more pronounced effect.

None of the several variables investigated in addition to the experimental treatment had any effect on cognitive learning. The number of black students included in the study was very small. For this reason it can not be said that race does not influence learning about Africa, but, at least, such effects were not apparent. Although there was a difference between males and females on the Inquiry Skills Test, this difference was not significant when the white males in the Experimental Group were compared directly with the white females in the group. Since these test results were not analyzed by grade level, no findings relative to this variable are reported. Students in Control Group Two (teachers with special preparation) did as well as those in the Experimental Group, but they did not do significantly better. This suggests that teacher

Figure 9 Misconceptions About Africa Held by Secondary School Students As Reflected in Specific Items On the Africa Achievement Test

Misconception	1967 Survey		Experimental Group		Control Group One	
	Grade 7	Grade 12	Pretest	Posttest	Pretest	Posttest
#1	56.7%	----	43.4%	28.4%	42.8%	32.0%
#2	55.1%	56.1%	52.8%	5.4%	57.2%	22.2%
#3	50.5%	63.4%	62.4%	21.6%	68.8%	44.8%
#4	48.5%	63.5%	53.4%	56.3%	51.8%	48.5%
#5	46.7%	55.5%	54.2%	30.5%	51.8%	36.6%

preparation does not significantly affect the cognitive learning results obtained by using Africa South of the Sahara: An Inquiry Program for Grades 7-10.

Tests of Affective Learning: The semantic differential instrument, Africa Attitudes Survey, was administered to the Experimental Group and to both control groups as a posttest only. Since all of the pretests had shown no variance between the groups, it was assumed that any differences found on the attitude instrument were the result of the experimental variables being considered. The scores on this instrument could range from a low of 7 to a high of 49. The higher the score, the more positive was the student attitude toward any given concept. A score of 28 was a completely neutral reaction.

Analysis of the results of this survey indicated that, in general, the students tended to respond to the concepts positively. The highest score for any one concept was 47.91 and the lowest was 25.21. Only HOMEWORK received mean scores below the 28 midpoint. No significant differences were found between the Experimental Group and Control Group One, although there was a suggestion that a tighter design or a more sensitive instrument might have detected significant differences for some of the concepts. For example, three concepts which had the highest F values are shown in Figure 10.

However, when the variable of teacher preparation is taken into consideration many of the differences are significant. The Experimental Group used the Project Africa materials taught by ordinary teachers, while Control Group Two used the Project Africa

Figure 10 Experimental Group and Control Group One Mean Scores on Selected Items of Africa Attitudes Survey

Concept	Class	Experimental mean score	Control One mean score	F	Sig.
Homework	White females	27.73	25.21	2.750	n.s.
Maps, etc.	White females	38.00	36.36	2.451	n.s.
Africa	White males	32.22	29.55	2.113	n.s.

materials taught by teachers with special preparation and motivation. The differences between the two groups' scores on the Africa Attitudes Survey (white male and female scores combined) are shown in Figure 11.

Figure 11 Experimental and Control Group Two Mean Scores on Africa Attitudes Survey

Concept	Experimental	Control Two	F	Sig.
School	36.05	41.38	.469	n.s.
Learning	38.25	39.52	1.452	n.s.
Social Studies	34.27	38.63	5.940	.05
Teacher	35.15	40.18	9.164	.01
Homework	26.92	28.09	.815	n.s.
Maps, etc.	37.88	40.73	3.870	n.s.
Africa	33.38	40.85	13.639	.01
Asia	31.22	34.82	6.143	.05
South America	33.15	36.95	4.850	.05

These results show no significant difference related to general attitude toward school, an even split in the four concepts related to the social studies classroom, and significant differences in attitudes toward the "non-western" world in general and especially toward Africa in particular.

Conclusions

Evaluation of Africa South of the Sahara: An Inquiry Program for Grades 7-10 began with several research questions. Some of these were clearly answered and others, due to weaknesses in the design of the study or in the instruments, were left unanswered.

The first question was, "Is the content of the program accurate, well-balanced, and up-to-date?" The relevant data comes primarily from the evaluations by the university scholars. Overall, the answer to this question is yes.

While certain factual inaccuracies were pointed out, primarily in the history Topic, these were relatively minor errors and easily corrected. There was no suggestion that the program as a whole tended to be biased or inaccurate. Lack of balance was seen as a problem only in Topic III, Changing Africa, and even there it was more an apparent lack of clear objectives for the materials than a problem of distortion. Only twice was there a question of the up-do-date nature of the materials. There was a suggestion that the culture study on the Hausa depicted these people in a more traditional light than is actually the case, and some of the readings on Zimbabwe reflected points of view which have been rejected by current scholarship. When the scope and depth of the Project materials are considered, these criticisms can be seen as important to those sections to which they refer, but of minor significance for the overall program.

The second question was, "Can teachers who have not had special preparation use these materials successfully?" Disregarding the question of whether teachers without special preparation can achieve the stated objectives of the program and looking only at whether these teachers found the inquiry strategy and the materials useable, the answer, based on the teachers' evaluations, is a qualified yes.

Most of the teachers had very definite problems, initially, in adjusting to the style of teaching demanded by the inquiry strategy. However, nearly all of them were able to adjust and, by the completion of the program, felt quite comfortable. Some difficulty was experienced with specific materials and specific suggested activities, but the vast majority seemed to work well. The design of the study called for the teachers to follow the teaching guides explicitly and this resulted in some frustration and suggestions for more flexibility. From this it can be readily concluded that a teacher could take the project materials and the

accompanying teaching guides and adapt them to his particular classroom situation and style of teaching and make them work very well indeed.

The third question was, "Do students and teachers find the program enjoyable?" The data from the teachers' evaluations, the student evaluations and some concepts on the Africa Attitudes Survey are relevant here. Enjoyment is, of course, a relative quality and the data only speaks to whether teachers and students found these materials enjoyable in comparison with what they normally teach and study. Based on these data the conclusion is that both teachers and students find parts of the program enjoyable and that probably the teachers were more favorably impressed than the students.

The introduction and first topic appear to have been enjoyed. The second topic was boring in spots and generally less exciting than what had come before. By the time the third topic was taken up, both teachers and students, but especially the students, were tired of the repetitious nature of the materials and teaching strategies. For example, filmstrips which were very favorably received early in the program were not rated very highly by the end of the study.

Probably two factors account for a diminishing "enjoyment" of the program of study. First, the Introduction and much of Topic I and Topic II had been revised at least once based on the pilot evaluation, while parts of Topic II and all of Topic III were being taught in their initial forms. No doubt the quality and mechanics of the first part of the program were better than those of the last part. Secondly, it is probable that more variety in materials, activities, and teaching techniques is needed as a change of pace throughout the course of the program. In fact, the high quality and great variety of the first segments of the course may have "jaded" the students to such a degree that nothing could maintain the level of enjoyment they initially experienced.

The fourth question was, "Does the program result in students learning knowledge about Africa?" Based on teacher evaluations, student evaluations and the results of the first four subtests of the Africa Achievement Test, the answer is an unqualified yes.

Both teachers and students were convinced that learning about Africa had taken place. The students especially commented on the reduction in their stereotyped image of the region and its peoples. That such a reduction in stereotyped knowledge did indeed occur is born out by the comparison of the experimental students' misconceptions after completing the study with their misconceptions before the study and with the misconceptions found in the general secondary school population.

When compared with the course of study that the students normally study, Africa South of the Sahara resulted in significantly more learning about the early history of Africa and about the people and culture of the region. This program also resulted in students learning much about the geography of Africa, although this was about the same that others learned in their usual courses. Students studying the project program learned just as much as those in the control groups in the area of colonial and current African history.

The fifth question asked if students who use this program increased their skills of intellectual inquiry. Apparently they did not. The lack of positive results on the Watson-Glaser Critical Thinking Appraisal and the ambiguous nature of the results on the Inquiry Skills Test form the basis for this conclusion.

Of course, the very nature of inquiry skills makes it difficult to get a definite answer to the question. It is difficult to clearly define the precise nature of these skills and even more difficult to secure or develop an instrument that will measure them. Whatever behaviors these skills represent, it is probable that they take longer than fifteen weeks to develop and that the effect of a course of this duration would be difficult to detect. Both students and teachers, however, did remark on improvements in the "thinking" behavior of those in the experimental classes. There was even some evidence that the increase in intellectual abilities carried over into other classes and did not die out over the summer. However, such remarks by persons who were aware of what the program was supposed to accomplish can not be given too much weight at this point.

The sixth question was, "Does this program result in students developing more positive attitudes toward Africa?" The answer is a very tentative "possibly." Some students did remark about such a change in attitudes and the semantic differential scores for AFRICA showed noteworthy, but not statistically significant, differences between the Experimental Group and Control Group One. Little more can be added to this conclusion at this point.

The final question was, "Do students who use this program develop more positive attitudes toward school in general and social studies in particular?" Here again it is difficult to give a firm answer. However, the weight of the evidence suggests that the answer is probably no.

The teacher evaluations and some of the student comments pointed in the direction of positive changes in attitudes toward school. However, the Africa Attitudes Survey did not support this. It seems probable that there is a very definite positive effect on some students. These seem to be students who are bright enough to succeed in school but who are bored and have a history of failure or of just scraping by. The profiles of the students reported in

the results and the comments by the teachers referred to above support this notion. Certainly this is an important area for future research.

Based on the answers to these seven questions, then, three conclusions about Africa South of the Sahara: An Inquiry Program for Grades 7-10 can be made:

1. Africa South of the Sahara does work in the classroom. Students who use this program of study will increase their knowledge of Africa, especially in areas such as early history and indigenous culture which have traditionally been ignored in American schools. This increase in knowledge will occur whether the teacher in the classroom has any special preparation in the methodology of inquiry teaching or not and whether the teacher has special preparation in the subject matter or not.

2. The methodology of inquiry-teaching will work with average students even where the teacher is unfamiliar with this style of teaching. Inquiry-teaching will work, that is, when the teacher is supplied with the necessary materials and with carefully structured lessons.

3. The primary factor which influences student attitudes is the classroom teacher's attitudes. A teacher can teach information whether he enjoys it or not. However, in order to develop positive attitudes among his students--toward school in general and his subject in particular--he must be sincerely enthusiastic about and committed to whatever it is he is teaching. If Africa South of the Sahara is to change student attitudes, it will do so by convincing teachers that the study of Africa is important and can be interesting and enjoyable.

In sum, the experimental materials comprising Africa South of the Sahara: An Inquiry Program for Grades 7-10 is an excellent source of materials and teaching strategies from which individual teachers can select those appropriate to themselves and their students. Implementation of this program, in toto, with any given group of students will likely accomplish most of the program's cognitive objectives, but only a minimum of the affective objectives. However, wise selection and careful adaptation can lead to a course of study which will meet most of these objectives for almost any group of students.

Summary

Project Africa's evaluation efforts were concentrated exclusively on the materials comprising its program of study for use in 7-10th grade social studies courses. This evaluation involved a limited pilot trial of these materials followed by a rather extensive, more formal field trial. This latter phase of the evaluation involved university specialists, teachers and students. Data were collected by means of questionnaires, annotated critiques and test instruments. Analysis of these data was performed and reported in a variety of ways with the intent of providing evaluative information for use by educators interested in using the project's materials.

The evaluation conducted by Project Africa, of course, leaves much to be desired. Considerably more field testing and much further analysis of evaluation data is needed in order to measure adequately the impact on students of different ability levels, ethnic backgrounds and grade levels of the project's 7-10th grade program of study. In addition, numerous materials developed by the project but untried in classroom situations need to be so tested and further refined. Nevertheless, it is obvious that most of the materials designed and developed by Project Africa do work in the average social studies classroom with students of average ability and can be used adequately by teachers who have received no special training in their use. Developing such materials was the major goal of this project.

V

DISSEMINATION OF RESEARCH

The ultimate goal of curriculum research and development is to improve teaching--and thus learning--in our classrooms. This was the objective of Project Africa just as it has been the objective of the scores of other similar university and Office of Education supported research projects. But improved classroom teaching and learning does not result merely from the development and evaluation of new materials, teaching strategies and curriculum outlines. Improved instruction requires dissemination of these new materials and of the products of all curriculum research. It requires getting these materials, techniques and ideas into the hands of those who are in a position to use them to affect learning--our classroom teachers.

Dissemination of the results of curriculum research and development projects can be viewed as having two basic dimensions. One of these dimensions is informational in intent and design. Before teachers can improve what is being done in their classrooms, they must become aware of the need for improvement--they must realize the gap between what it is that is going on in their classrooms and what ought to be going on there. Once this has been realized, teachers then must somehow become informed about how to close this gap--they must find better ways to teach and different and presumably better materials to use. Helping teachers deal with these tasks--helping them ask and answer the questions: What needs to be improved and why? How can these improvements be made? What can be used to make these improvements?--is primarily an information-providing task. And it is an important part of the dissemination of results of curriculum improvement research.

The second basic dimension of curriculum improvement research dissemination is that of training. Informing teachers of ways to improve instruction and materials that can be used is only the first step in initiating such improvements. Providing training in the use of new materials and teaching approaches is also necessary. Thus, dissemination of the results of curriculum research and development efforts must also include some practical training in specific ways to bring about the improvement sought by providing guidance in the use of the materials, strategies and other results of the developmental research.

Project Africa's dissemination activities sought both to help <u>inform</u> teachers about and to help train them in ways and materials to improve instruction about Africa south of the Sahara in their classrooms. Although the distinction between these two aspects of dissemination were not always clearly de-

fined--indeed, at times the two dimensions were so interwoven in the same activity that they were indistinguishable--we have chosen to describe them separately here for purposes of clarity.

Disseminating Information

One way to alert those engaged in teaching about Africa south of the Sahara to the inadequacies and weaknesses of typical classroom studies of this region is to put teachers in touch with descriptions of the wide range of objectives, teaching approaches and materials suitable for use in their classrooms. The staff of Project Africa made numerous efforts to do this primarily through the use of various publications and direct, personal contact.

Publications: Project Africa attempted to reach teachers in a variety of ways through the printed word. A number of publications were issued directly by the project especially designed to inform teachers about the nature of the project and its research as well as about the wide variety of commercially prepared instructional materials on Africa south of the Sahara already available for use in their classrooms. A detailed summary of project activities and plans as well as brief descriptions of materials developed, research undertaken by the project, and catalog lists of project materials available from ERIC were mailed to hundreds of teachers in response to their queries for information and assistance. Detailed compilations of project research into student stereotypes and knowledge, available commercially-produced instructional materials, and opinions and views of educators and African specialists as presented in the professional literature were distributed to teachers on request as long as the limited supply lasted.* These publications were designed to alert teachers to the wide variety of materials available for their immediate classroom use and to provide them with guidelines and suggestions for organizing improved studies of Africa south of the Sahara in their schools.

The pages of professional journals provided a second avenue for project-teacher communication of an informative nature. Teachers were periodically alerted to the existence and work of Project Africa by descriptive features and reports in a wide variety of journals and other publications including Grade Teacher, Africa Today, The African Studies Bulletin, Social Education, the Foreign Policy Association and International Studies Association newsletters, Focus on Asian Studies, Civic Leader, News and Notes In the Social Studies, and Memo, a publication of the United States

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* Images of Africa: What American Secondary School Students Know and Believe About Africa South of the Sahara (36 pp.) and Africa South of the Sahara: A Resource Guide for Secondary School Teachers (210 pp.). See Appendix B.

National Commission for UNESCO. Bulletins distributed by various state education departments also carried notice or descriptions of the project's activities.

Articles describing and summarizing various aspects of project research were also published in a number of journals of national importance, including The Journal of Negro Education, Social Education, The African Studies Bulletin and Media and Methods.*

Finally, the results of our research--in the form of reports and instructional materials, teaching guides and student materials--were deposited in the ERIC Document Reproduction Service where, for a small reproduction fee, they are available to any interested educators. Most of these materials may be secured in paper. All are available in microfiche.**

Personal Contact: The second major method utilized by the project staff to inform teachers about ways to improve the teaching of Africa south of the Sahara was by means of personal contact either in the form of speeches and addresses to large gatherings of teachers or at teacher training workshops and in-service programs.

The project director and associate director presented--by invitation-- a number of papers and delivered several addresses to plenary and other large group meetings of national organizations to which educators interested in African studies customarily belong. These included presentations before the Association for the Study of Negro Life and History, the African Studies Association, the National Council for Geographic Education, The National Council for the Social Studies and the American Educational Research Association. A number of additional similar presentations were also made at annual meetings of state social studies councils, at local social studies council meetings and at special conferences such as those sponsored by Michigan State University, the Foreign Policy Association, the African-American Institute and the Association for Asian Studies.

Other informational presentations were made at numerous teacher workshops sponsored variously by universities, local school systems, private organizaions and other organizations interested in education. Unlike the more formal presentations to larger gatherings, these presentations frequently emphasized specific guidelines for improving classroom teaching about Africa,

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* See Appendix E.

** See Appendixes B and C.

descriptions of useful available materials and, occasionally, demonstrations of project-designed materials and teaching strategies.

Informing teachers about the work of Project Africa or about ways and materials for use in teaching about Africa south of the Sahara involved more than just the permanent staff of the project. Consultants and teachers associated with the project, because of their experience with the project, also found opportunities to talk with groups of teachers, either in workshop-type situations or in district, local or state social studies council meetings.

Communicating with teachers about improving instruction on Africa, while an activity of secondary concern for the project staff and consultants, was nevertheless an important aspect of Project Africa's dissemination activities. At times this communication was of an entirely informational nature. But other times it involved informing and training teachers. Indeed, the project originally proposed to undertake a major teacher-training effort as an integral part of its work.

Teacher Training

Project Africa recognized from the first that improved instruction about Africa south of the Sahara involved more than talking to teachers--it required working with them as well. The project staff thus engaged in a number of activities designed to provide training in the use of new methods and materials to classroom teachers whose prime responsibility was to teach about Africa south of the Sahara.

Some of these activities were less obvious than others. In employing experienced classroom teachers as researchers each summer, for example, the project was actually engaged in training them in ways to improve classroom instruction about Africa both by providing them carefully supervised opportunities to create new materials within a conceptually-oriented, multi-media, inquiry-teaching framework and also by giving them the resultant materials and units to use, under controlled conditions, in their own classrooms. In the course of the project ten teachers received this type of training.

Another twenty teachers also received considerable "training" in new ways and materials to use in teaching about Africa south of the Sahara, although this "training" was only indirectly supervised and probably not always consciously undertaken. These were the teachers who used experimental materials and strategies designed by the project in the classroom field trial evaluations. Sixteen weeks of conscientious use of these materials in actual teaching situations, even if without direct instruction, contributed significantly toward improving the teaching of these experimenting teachers as attested by their own subsequent evaluations and those of their supervisors.

It is interesting to note here that as a result of participation in the Project, either as summer curriculum researchers or as experimenting teachers, many of these thirty educators have significantly altered their own teaching in ways they and their supervisors view as "improved," have been asked by their schools as well as neighboring schools to work with other teachers to help them upgrade their teaching about Africa south of the Sahara and have conducted and continue to conduct local in-service programs on teaching about Africa south of the Sahara.

Project Africa also made special efforts to provide extensive in-service training to large numbers of teachers whose major responsibility it is to teach about Africa south of the Sahara in secondary grades throughout the United States. This training was built on a belief that until teachers become aware of how uninformed and unaware they really are about African history, culture and development--until teachers become aware of the extent to which their own cultural biases color and distort what they themselves believe and thus teach about this region and its peoples --until teachers become aware of ways to use content about Africa to accomplish broader conceptual skill and affective objectives--until teachers become aware of these things, there can be little if any significant improvement in classroom teaching and learning about Africa south of the Sahara.

Hence, Project Africa, as an integral part of its curriculum research and development, organized a number of large-scale, continuing in-service workshops in selected areas of the United States during the Fall of 1969. These programs were designed specifically for secondary school world geography and world history/cultures teachers. They emphasized information about Africa south of the Sahara, strategies and techniques for using inquiry to teach about Africa, and commercially-prepared as well as teacher-made materials for use in the classroom.

Each workshop consisted of seven two-hour meetings. Each meeting was devoted to a different aspect of teaching about Africa and each featured a different speaker or leader. Part of each meeting was devoted to a formal presentation by the speaker and part was devoted to questions from and discussion with the participating teachers. Finally, each presentation was built around content and materials illustrative of the most desirable approaches to classroom instruction about Africa south of the Sahara. Audio-visual materials were used extensively throughout each workshop.

The General structure of these workshops was as follows:

Session I: <u>Changing Africa</u> - An overview of the present scene in Africa south of the Sahara with emphasis on the dynamics of change--and analysis of the forces for change,

the roots of resistance to change and the human responses to change. This session was designed more to stimulate questions than to provide answers.

Session II: Geography - An overview of the physical geography of the continent with discussion of the limitations and potentials that the physical environment have in the past and may in the future impose on human activities. Content was presented within a conceptual framework that attempted to explain the geographic origins and evolution of Africa as well as the effect of its habitat on the peoples of the lands south of the Sahara.

Session III: Indigenous Culture and Society - An overview of selected characteristics of life styles and cultures indigenous to Africa South of the Sahara. Information about these characteristics was presented and analysed through presentations of African art, dance and music.

Session IV: Historical Development - An overview of African history from prehistory through the period of the Atlantic slave trade with special emphasis on forces that have helped shape contemporary Africa south of the Sahara and the impact of these forces on individual Africans. Considerable attention was devoted to an analysis of ancient African kingdoms and empires.

Session V: Nation Building -- An analysis of the independence movement in Africa south of the Sahara including pre-independence pressures, post-independence problems and current prospects.

Session VI: Africa in the World Today - An analysis of inter-state relations among the nations of Africa and between African nations and other nations in the world with special attention to current events

in Rhodesia, Nigeria, South Africa and the Congo. Emphasis was also placed on examples of international cooperation for national development.

Session VII: Teaching About Africa South of the Sahara — A conceptual framework for teaching about Africa south of the Sahara in secondary schools including demonstrations of appropriate teaching strategies and new instructional materials.

Each of these sessions featured a different speaker. The speakers were drawn from the project's consultants and included African, European and American scholars and educators. Each workshop, for example, was launched by a presentation by Professor Absolom Vilakazi, chairman of the African Studies Program at The American University in Washington, D.C.. Among those conducting subsequent sessions of these workshops were Professor Burton Witthuhn (geography) of The Ohio State University; Professor Graham Irwin (history) Institute of African Studies, Columbia University; Professor Robert Thompson (indigenous culture/music and dance), Yale University; Professor Matia Kiwanuka (history) Makerere and Duke Universities; Edward Cutler (indigenous cultures) Frederick Douglas Museum of African Art; Professor James Gibbs (indigenous cultures), Stanford University. Other well know university scholars made occasional presentations. The project director and/or associate director conducted the final session of each workshop. Every speaker was an outstanding scholar and recognized specialist in his field. All had worked extensively with teachers--most had made significant contributions to the Project's curriculum development activities as well.

The mechanics of these workshops were relatively simple. Each workshop was conducted in cooperation with a sponsoring school system that recruited qualified teachers from among its own faculty and from neighboring systems. This school also scheduled the workshop sessions, provided meeting facilities and provided a workshop administrator who was given released time to recruit participants and arrange and conduct each session. Project Africa coordinated the entire workshop program, secured and scheduled speakers, underwrote all administrative and travel costs and speaker honoraria and provided study and other bibliographic materials. Workshop sessions were generally conducted on a once-a-week basis for seven weeks although there were a variety of other ways they could have been scheduled. Most workshops required certain outside reading. In-service credits were usually awarded by the schools of the participants.

Our original plan of operation called for Project Africa to sponsor and conduct eight workshops organized on this model, each

enrolling up to one hundred qualified teachers, during the final nine months of operation. However, a sizeable cut in project funds during its final fiscal period eliminated all but three of these workshops. One workshop was held for seventy teachers of the Tucson, Arizona and surrounding public school systems; another for ninety teachers in the Buffalo and western New York area; and the third for seventy-five teachers in the Plainview-Old Bethpage and surrounding school districts on Long Island. Scheduled workshops for qualified teachers from school districts in and around Eugene, Oregon; Pittsburgh, Pennsylvania; Cleveland, Ohio; Baltimore, Maryland and Denver, Colorado were cancelled by the elimination of project funds requested for them.

Nevertheless, the three workshops that were held accomplished the objectives set for them--and more. Over two hundred and thirty private and public secondary school teachers of African studies participated regularly in these in-service training sessions. Almost without exception these teachers and their supervisors responded with enthusiasm to the complete workshop programs. Most indicated they found the presentations and follow-up discussion "both stimulating and enlightening." In summary of the workshop conducted in Western New York, Mr. Bronson Collins, social studies chairman of the Hamburg (New York) Central Hgih School and workshop director noted:

> We, in Hamburg, want you to know, first of all, how much we appreciated the opportunity to participate in such a wonderful series of stimulating lectures on a much needed subject.
>
> This sentiment is echoed by all the participants. So many of the enrollees said to me, in the same vein, "How else would we have been able to hear such experts...?"

That this was not an isolated reaction is affirmed by the Assistant Superintendent of the Plainview-Old Bethpage (New York) schools who wrote:

> I want you to know how pleased I am with the manner in which the Project Africa workshop has been accepted by our staff, and I quote from one of the letters that has been sent to this office:
>
> "I have been taking the Inservice Course, Project Africa, this fall and because it is one of the most interesting and worthwhile courses I have ever attended, I want to thank you for arranging it. It is a privilege to

hear outstanding scholars each week, and the materials they bring with them and distribute, adds to the value of the lecture...."

The in-service teacher training programs sponsored by Project Africa were an important, if somewhat secondary, feature of its overall curriculum improvement effort. They brought together teachers whose concerns were quite similar but who were very likely to be unknown to each other. They disseminated vitally needed information about content, teaching materials and instructional strategies and provided limited training in their use. They gave classroom teachers and outstanding specialists in African studies an opportunity to meet and work together on a subject of mutual concern. Above all, they "turned teachers on"--and turning teachers on is one of the first steps toward improved classroom instruction, about Africa south of the Sahara or any other subject.

Summary

One of Project Africa's most important functions was in the area of dissemination. This consisted of informing teachers--via specially printed materials, articles in professional journals, use of the ERIC system, presentation of formal papers at national conferences and presentations in state and local meetings and in-service workshops of the wide variety of objectives, approaches and materials available for use in teaching about Africa south of the Sahara. This dissemination also consisted of providing needed training in content, methods, materials and ways to use them in the classroom, by direct instruction, example and supervised practice in the forms of research internships, classroom experimentation and continuing in-service workshops.

Improved classroom instruction about Africa south of the Sahara requires more than just developing and evaluating new learning materials and teaching strategies. New materials <u>per se</u> have no impact on instruction unless they are implemented in the classrooms of our schools. This requires extensive communication between curriculum developers and classroom teachers. This was the purpose of the dissemination undertaken by Project Africa.

No matter how many or what kinds of learning materials on Africa south of the Sahara are produced or already exist, if teachers do not know of them or know how best to use them to facilitate learning there will be little if any change, to say nothing of improvement, in their classroom teaching. No matter how much information there is about the subject matter used in the classroom, unless teachers are in some way brought into contact with it <u>and helped to see better ways to use it</u>, they will

not have the background requisite even to attempt to improve classroom instruction. Unless teachers can become informed of different ways of teaching about Africa south of the Sahara, there will be little incentive on their part to change what they now do. It is the prime function of curriculum dissemination fo inform and guide teachers about these aspects of improved instruction. Any curriculum improvement project, if it hopes to have a significant classroom impact, must find some way to work with teachers in the areas of materials, instruction and content.

VI

CONCLUSION AND RECOMMENDATIONS

Project Africa was a major social studies curriculum improvement effort. It was, to some degree, quite typical of the national social studies curriculum improvement efforts which mushroomed in the middle sixties. But in some ways this project was also unique.

Project Africa was a highly original endeavor dealing as it did with an area of content untouched by any previous curriculum improvement efforts of similar magnitude, with resources that oft-times required considerable search to identify and locate and with a teaching strategy quite unfamiliar to most educators. This project was also national in scope--national in the sense that what it attempted to do had utility throughout the United States and was not restricted by any state or local curriculum requirements. Furthermore, it was national in its source of support as well as in the resources upon which it drew.

Project Africa was, in another sense, quite limited. Of the goals it set for itself, that of designing new instructional materials was by far its major concern. All other objectives, however related to this objective, were considered quite secondary to this task. Evenso, the work of the project required the expertise of many people--including specialists on Africa, experienced classroom teachers, specialists in various facets of teaching, evaluation, media and curriculum, and students themselves. Project Africa was, indeed, a cooperative effort of many talents.

A Summary of Accomplishments

Project Africa undertook a research and development program of forty months duration--from March 1, 1967 through June 30, 1970. During this period it used approximately $175,000 in federal and university funds as well as thousands of man-hours of creative, developmental endeavor. What is there to show for all this?

First, there is some very considerable basic research that has proven and will continue to prove useful to teachers who wish to improve their own teaching about Africa south of the Sahara. This research provides detailed data on what selected American students typically know about this region and its peoples prior to their secondary school study of these topics. It also describes a wide variety of suggested objectives, organizational patterns and approaches for use in instruction about Africa south of the Sahara in our secondary school grades. Finally, our research identified and describes over 700 commercially-prepared instructional materials of all types that may be used in classroom study of this subject. All of this research is readily

available to teachers through the ERIC Document Reproduction Service.

Second, Project Africa has designed and produced experimental copies of a whole host of new instructional materials on Africa south of the Sahara including resource maps, single concept filmstrips, programmed tapes, a data book, overhead transparencies, data cards and numerous reading materials. Most of these materials have been tested in a variety of classrooms with a variety of students and have proven their workability as well as their usefulness in improving learning about Africa south of the Sahara. All of these materials are available to teachers directly through the ERIC Document Reproduction Service--either in their original form if written or paper materials or via descriptions of them if they are filmstrips. Revisions may be needed in many instances before these materials can be best used in any classroom, but these materials are nevertheless now available for classroom use.

Third, detailed teaching guides that weave these new materials into inquiry-oriented learning experiences have been developed and are available, again through the ERIC service. Although the project's materials may be used in a wide variety of ways, teachers wishing to engage their students in inquiry learning about Africa south of the Sahara or any other social studies topics may find these pre-planned lessons most useful--if only as bases for devising similar lessons of their own.

Fourth, the project has, in most instances, conducted extensive evaluation of its materials and teaching strategies, and the results of this evaluation are also immediately available, through ERIC. Content presented in the 7-10th grade materials has been carefully critiqued by outstanding scholars; the materials and their use have been analysed and evaluated by students and teachers alike; and a variety of evaluation instruments were administered to determine how well inquiry-structured use of these materials contributes to accomplishing their prescribed objectives. Such data will be most useful to teachers planning to use the project materials or to develop their own materials.

Finally, the in-service teacher workshops conducted by Project Africa may serve as a useful model for educators interested in improving the quality of instruction on or merely teacher background information about Africa south of the Sahara in their schools. The basic elements of these workshops--content presentations by internationally recognized scholars, use of materials and methods readily adaptable for secondary school classroom use and considerable emphasis by demonstration, analysis and further study of the "how to" and "what with" aspects of teaching about Africa south of the Sahara, these basic elements may be structured in a wide number of ways in order to help classroom teachers gain new competencies and confidence. The

model developed by Project Africa is merely one such approach to such in-service training, albeit one that seems to work quite well.

There is, however, another accomplishment of this project that cannot be packaged for immediate dissemination to teachers. That is the close working relationship that evolved during the work of Project Africa between a large number of university and college specialists in African studies on the one hand and secondary school teachers and educationists on the other. Involving all of these educators in curriculum development work on Africa has led not only to an awareness and better understanding of the concerns each of the other but also to the development of a mutual interest in cooperative endeavors to deal constructively with these concerns. Project Africa has not only met certain teacher needs for attention, information and other assistance but has also opened new links between secondary school classrooms and universities. Classroom instruction and scholarship can only benefit as a result.

The accomplishments of Project Africa are thus of several types--both hard data and experience. They are quite closely related to the original objectives of the Project. The original proposal for this project, in fact, stated that the "expected outcomes...will be:

(1) An annotated bibliography of selected curriculum and teaching guides on Sub-Saharan Africa.

(2) A statement of concept, understanding, attitude and skill objectives for instruction in Sub-Saharan Africa in ninth grade world geography, tenth grade world history and senior electives.

(3) Teaching guides, content outlines and instructional materials for use in instruction on Sub-Saharan Africa at these selected grade levels.

(4) Improved teacher awareness--via in-service workshops and printed annotated bibliographies--of the availability of these materials for classroom use.

(5) Improved communication between scholars, educators, educational media specialists and classroom teachers in common efforts to improve education.

(6) Improved instruction in and understanding of the history, culture and development of peoples of Sub-Saharan Africa."

All of these outcomes are reflected by the accomplishments listed above--with one exception.

It would be erroneous to claim that because of Project Africa's research the sixth predicted outcome--improved instruction in and understanding of the history, culture and development of peoples of Sub-Saharan Africa--is a reality, at least in more than a handful of classrooms. Whether or not there will be any improvement in teaching and learning about Africa in our classrooms remains yet to be seen. What Project Africa has done is to provide some very basic tools which can be used to bring about this improvement. For without these tools--without good basic research, good materials and useful teaching guides--there can be no improvement at all. But using these materials to bring about improved learning is something beyond the power of the Project to ensure. This is something that falls to educators at state, local and classroom levels. What Project Africa has done is to make needed improvements possible--but it is up to other educators to make these improvements a reality.

It would also be unfair to give the impression that any improvements in teaching and learning about Africa have been the direct result of Project Africa's research. The Project has influenced a large number of classroom teachers and educators, to be sure. But it's work has been reinforced, aided and expanded by a number of other similar, state and local curriculum improvement efforts, by a considerable interest in Afro-American studies which has mushroomed in the past several years, and by the great number of commercial instructional materials that have deluged our schools since 1967. Project Africa stands today as just one force--although the only one of national scope--for improved classroom instruction about Africa.

Commentary and Evaluation

Curriculum development--on Africa South of the Sahara as on any other subject--has frustrations as well as satisfactions. It would be erroneous to give the impression that our work, while it has been somewhat fruitful, has been devoid of any of these frustrations, for it has not. Not everything the project set out to accomplish has in fact been accomplished, especially in a form in which we would like ideally to have it done.

The project was, for example, unable to secure all the kinds of expertise it needed in the numbers needed. It was unable to develop and test a number of instructional materials that were suggested or required by its research. It was unable to conduct the kinds of evaluation originally proposed or ideally suited to the kinds of materials being developed. And, it was unable to do as thorough research on materials for the 12th grade as on other materials it developed. A further word about each of these deficiencies is in order here.

One difficulty which Project Africa faced related to staffing. Although the Project relied on the talents of a great many people, the specific talent most required was that of creating learning experiences and materials useful in inquiry-oriented instruction. This talent, we found, was in short supply, indeed. It is the rare university or college specialist that possesses this creative ability and, we found, it is also difficult to find even in the ranks of experienced classroom teachers. There is no dearth of classroom teachers interested in or desirous of making inquiry-oriented materials on Africa, of course. But there are very few able to do so successfully.

Unlike many curriculum projects which focus on more traditional subject matter, Project Africa found a very small pool from which this creative talent could be drawn. Considerable efforts were made to probe this pool--Peace Corps training centers, special teacher programs on Africa (Teacher Educators in East Africa, Operations Crossroads, Fulbright programs), NDEA institutes, university African studies programs and state education department specialists were all contacted repeatedly in the hopes of identifying potential developers. Assistance was also sought through the publications and appropriate divisions of the National Council for the Social Studies and the African Studies Association. Eventhough a number of educators were identified, and some even did join the project staff through these avenues, the results of their work was not always up to expectations.

There are many reasons for this difficulty, obviously. Perhaps our guidelines were unrealistic. Certainly, inquiry teaching is not easy--nor knowledge of it very common. Productive working with inquiry requires considerable training and practice. Yet we found, too, that knowledge of Africa per se was no indicator of ability to create useful materials. Being a Peace Corps returnee, experienced teacher with residence in or extensive university study of Africa or even a graduate student in African studies programs did not guarantee either accurate knowledge of Africa, sensitivity to African culture, awareness of one's own cultural biases or knowledge of how to teach about Africa in inquiry-fashion.

Consequently, much of Project Africa's research did consist of on-the-job training of materials developers. And most of the creative design of materials fell to the director, associate director and research associate. Although this was to some degree anticipated, the extent to which it was required was not, and considerable time was thus used in these activities that could have been used in creating and designing other materials, as, indeed, had been the original plan. Thus, the inability of the Project to secure in every instance the kind of qualified staff required did limit what it could accomplish.

Project Africa also was unable to secure enough staff to carry out its work. This was directly related to the funds al-

lotted the project by its sponsors. As the project progressed it became obvious more materials developers, for example, were needed than had originally been provided for. However, two sizeable budget cuts further reduced the number that could be employed, thus restricting the work of the project evenmore. During the first and second summers of materials research and development, for instance, the project utilized the services of eight experienced teacher materials researchers; during the final summer, however, funds for only four were available. To compensate for this the project experimented with having a number of materials prepared on a per-unit basis by educators working during the year at their own schools, but the results proved generally unsatisfactory. Requests for additional funds for staff and for reinstatement of budget cuts were not granted and thus, to a considerable extent, the project did carry out its work with less staff than desired and needed. And this was, of course, reflected in what we were ultimately able to accomplish.

A second frustration--or difficulty--or weakness--in the work of Project Africa was related to the kinds of materials we developed, or tried to develop. It was determined early in the project to give heavy emphasis to audio, visual and manipulative materials. However, securing the raw materials--original sound recordings, slides and drawings--necessary to produce these was extremely difficult, and in most cases impossible. This was partly a result of inadequate funds--or limited funds made inadequate by the excessive expense of securing items which were available only in Africa or only at extremely high prices--and partly the result of being unable to find suitable sources in the first place. A wide variety of certain types of slides were needed for certain units, for example, but none could be located in the scholarly community. Employing the aid of professional photo researchers proved to be impossible because of expenses involved. Requests for additional funds for a photographic expedition to Africa were not approved. Thus, certain materials the project wanted to incorporate in its units could not be prepared--or, in a few instances, these were created out of inferior sources which were the only sources available for experimentation.

In other instances, project researchers proposed to develop materials that proved to be so expensive in terms of reproduction for experimentation and/or eventual commercial reproduction as to make them impractical of inclusion in our materials. Such was the case, for instance, of a punch card activity designed to accompany the data book; possibilities of producing sets of pre-punched cards appeared so dim that plans to develop them for experimentation were dropped. A slide-tape introduction to Africa also proved to be excessively expensive, both in terms of securing needed slides and in developing the mechanics of the materials, so that it was designed but not produced for classroom experimentation. Preparation of 8mm loops and of programmed filmstrips, tapes, and texts

was also considered but eventually rejected for these reasons also.

This is not to say, however, that no materials were produced because obviously Project Africa did develop a large number of materials. The point is that better materials and a wider variety of materials could have been developed had there been considerably more funds available for this purpose. Many teachers, scholars, professional photographers and others did loan slides and tapes to the project for experimental purposes for a small fee and these proved most useful in designing what prototype materials we were able to create and develop for inclusion in our materials. With additional funds to seek out or make our own originals, however, even better materials could have been designed.

Third, Project Africa was unable to conduct the kind of evaluation originally proposed. This was a result of lack of funds as well as of a lack of time and of an inability to secure adequate controls in field test situations. As noted above, the decision originally to concentrate on materials design and development was crucial for it meant that the vast majority of funds allotted the project would be spent for these purposes as they were. Thus, funds for evaluation were limited in the first place--and not always correctly estimated at that! Further later budget reductions served only to accent these limitations by reducing the number of experimenting classrooms (by restricting the quantity of experimental materials we could produce), by eliminating any on site observational evaluations of these experimental classes or even strict controls over them, and by limiting the kinds of analyses that could be made of the evaluative data itself.

Moreover, evaluation took much more time than was originally anticipated. Because of lack of staff--especially full-time permanent staff to whom these responsibilities would have been delegated, the design of evaluation instruments was considerably delayed and the amount of time required to collect and analyse the results took much longer than originally planned. Consequently the analysis of this research was less thorough than we had planned, and was completed so late as to prevent any significant revision in materials placed in the public domain. Thus, as useful as is the evaluation that was completed, there is no question but that a more thorough evaluation could and should have been done.

There are, for example, several types of further evaluation still needed. One area we need further information about is the effect of this type of in-depth, inquiry study of Africa south of the Sahara on black students as compared to white students. Although such information was sought in our evaluation, the types of schools participating did not make it possible. A second area requiring considerable further investigation is that of the long-range effects of this study on students of a

variety of academic abilities and ethnic backgrounds--on the skills, attitudes and knowledge they may retain or lose over the years. Certainly any complete evaluation of a curriculum project such as Project Africa requires these kinds of evaluation, too.

A fourth frustration was the inability to design as thorough a 12th grade program (as was originally proposed) as we did 7-10th grade program and then to submit it to extensive classroom evaluation. This again was the result of a lack of funds and of time, and grew out of our decision, made early in the project, to concentrate available funds and time on areas <u>most</u> needing help--areas in grades 7-10 where study of Africa south of the Safara is required and therefore inescapable by student and teacher, areas where help was most needed and needed immediately. Two and one-half years were spent in designing and testing the 7-10th grade materials; less than half that time and reduced funds were available to replicate this procedure for 12th grade materials as should have been done. Consequently, the 12th grade materials are considerably fewer in number and completely unevaluated. Such was not the original intent of this Project.

In sum, if Project Africa did, indeed, accomplish most of its objectives, it also suffered from a number of weaknesses. The roots of these weaknesses seem to be two in number--inadequate funds and inadequate staff.

That curriculum development on Africa south of the Sahara requires many talents is certainly true. And while all those who did contribute to Project Africa made major, constructive contributions additional contributions were much needed. The project regularly employed the services of one half-time research associate; at least three such researchers were actually needed. The associate director should have been full-time, or almost full-time, on the project on a year-round basis. But the primary need was for talented creators of inquiry-oriented materials on Africa south of the Sahara. The pool of such talent is extremely small--considerable training must be undertaken to enlarge this pool. And considerable research is needed to identify qualified developers from it.

This leads us to an observation about curriculum development project staff. In its most direct terms, it is simply this--classroom teachers are not necessarily good curriculum or materials builders. Most classroom teachers, at least of African studies and we suspect this is true of all other social studies areas, too, seem most experienced in imparting content to students--in taking a given body of content and teaching it. In so doing they frequently develop ways to make this material interesting to students. And they learn how to conduct research to unearth information for use in their classes. But they very infrequently develop any

expertise in the types of skills needed for good curriculum development.

Many teachers, for example, fail to conceptualize what they do in the classroom. They tend to be content-oriented, covering a succession of chapters in a text or topics in a syllabus. In addition, most teachers seem to be "carrier-outers" who need, and indeed seek, considerable direction. Most also, in spite of developments of recent years, seem to be primarily print-oriented and didactic in approach. Good classroom teachers--those who can take a piece of material and make it come alive for students--may in most instances, never be able to create that same piece of material.

If classroom teachers per se are not necessarily good materials developers, college and university professors are no better. Most of these educators--specialists in a narrow area of content within a specific discipline--pay all too little attention to the methodology of teaching and learning and consequently find it extremely difficult to break the read-recite-lecture-test approach to instruction. The talents of a good curriculum materials developer are rare, indeed.

If these observations are fairly accurate, the implications are many. Most social studies curriculum development is done on a local level, primarily by local teachers. Often those engaged in such endeavors are selected precisely for this reason--they are local teachers who need or want a summer job developing materials. The results of their work can hardly be called creative--or even useful--in all too many instances.

What is needed, and needed urgently today, is some in-depth research into exactly what are the talents of good curriculum materials designers and how to identify them. Once this is known local instructional improvement efforts and larger curriculum research projects such as Project Africa can use this information to identify and employ the kinds of talent needed to produce useful materials at minimum expense of time, effort and funds--and teacher-training institutions can begin to devise and implement programs designed to develop these talents and produce educators capable of developing useful instructional materials.

Inadequate funds seemed to be a second underlying problem facing Project Africa. There were many reasons for this--including inappropriate estimating and planning in the proposal stages of the project, reductions in funds by the sponsoring agency during the life of the project and the complexities of curriculum materials development in the first place--in terms both of time and money. Good materials development does take time and thus requires considerable money. It is not something that can be done in a summer on a shoestring. Neither is it a one-man job.

Project Africa may be unique in this situation. There is little if any previous work in African studies curriculum to which it or any other similar project can turn for guidance. Resources are difficult to secure. Knowledge about the subject is in a constant state of flux. As a result, developing materials to teach about this subject is most time-consuming. Once objectives have been determined needed resources must be identified, located and secured, and these are very time-consuming tasks. Then these sources must be translated into instructional materials for use in certain teaching strategies. This is even more time-consuming. For our project , for example, a minimum of thirty-months were required to research, design, pilot, revise and evaluate a complete, one semester program of study. Good curriculum materials development is more than a short-term task.

Because so much time and the efforts of so many different specialists are required, curriculum materials development can be quite expensive. Thus, considerable financial resources are needed to support any such research effort, especially when the effort deals, like Project Africa, with a relatively new, previously unexplored body of content and materials. Moreover, these funds must be somewhat elastic and flexible. There was, for instance, in this project, a need for funds in areas unanticipated at the time of the project's inception. These needs could not be met without eliminating certain procedures or objectives already determined to be desirable, too. Yet, by not meeting these newly arisen needs the quality of the completed research is lessened. Flexibility in amount of funds available for such research would eliminate this situation.

Curriculum materials research of the type engaged in by Project Africa is not the same as traditional educational research. Because materials research is developmental in nature, it is quite likely to be rather open-ended. It is a creative enterprise and as such the researchers are not always aware at the start of the exact directions it will go or the obstacles or problems that may arise in the process. It is therefore important that resources applied to this research be most flexible--not only in how they are allocated but in the total amount that can be allocated. Any worthwhile curriculum development research should be backed by funds that can be made available to meet unanticipated, but crucial needs if this research is to be suitably productive.

There are undoubtedly other reasons for whatever problems may have arisen during the life of Project Africa. Certainly the inexperience of all those associated with the project was a contributing factor to some of these. Nevertheless, in spite of whatever shortcommings arose or may be evident in the structure, staff or plan of operations of the project we were able to substantially accomplish the outcomes proposed in 1965.

Lessons and Implications

Project Africa represents one way to organize efforts to improve teaching about a specific area of the social studies. It elected to concentrate primarily on research and design of new learning materials about one region of the world for use in selected grade levels of American secondary schools. Such an approach obviously has certain weaknesses as well as strengths. Certainly the work of this project, however, also has some useful implications for similar efforts to improve teaching and learning about other areas of the social studies. This report would not be complete without brief mention of some of these implications.

Our experience in Project Africa suggests certain observations and lessons we think may be especially applicable to any similar project on any area of the world and even to any project on any aspect of the social studies in general. The work of Project Africa seems to indicate that if a social studies curriculum improvement effort is to be successful, that is if it is to bring about improved teaching and learning in our classrooms, it should:

1. Start with a realistic rationale: In order to improve learning about a particular topic in our schools, there must exist a clearly defined rationale for studying that topic in the first place. No body of content should be a subject of study simply because "it is there" or even because it is the next topic in the text or in the syllabus.

   A useful rationale starts not with the content to be "taught" but with the total program in which this content is to be used. It must start with an identification of the knowledge, skills, attitudes and values students should have at the conclusion of their total program and then move to a determination of how content about this specific topic can be used to achieve these objectives. Unless this is done the resultant research can be little better than a rehash of what already is going on in our classrooms.

2. Be based on what already is known about the teaching of the topic under study. Good teaching starts with what students already know or believe about a topic and builds from there. This is as true about any social studies body of content as it is about teaching about Africa, Asia or some other world region. Studies of what has been suggested as possible avenues for improvement--in terms of objectives,

structure, materials, content and methods that can be used--should also precede any specific developmental research, as should surveys of materials already available for use in our classrooms. Results of research into these three basic areas--student knowledge, professional advice and existing materials--can prove to be a valuable basis for productive instructional materials development.

In the case of content areas about various world regions, another area of research, neglected by Project Africa, could be most useful. This is research to discover what nationals of the region to be studied believe Americans should know about their home region. Such a survey, especially if made of knowledgeable people, can be quite expensive and time-consuming, but it nevertheless appears to be indispensible if the subject of improvement is a particular world region--especially if this region is one of those typically classified as "non-western."

3. Emphasize materials development: Good materials are a key to improved classroom instruction. They must exist before any other steps to improve teaching can be taken. There are several aspects of this assertion that should be amplified.

First, materials development must be viewed as something other than collecting source readings or writing new texts. Considerable emphasis instead ought to be placed on developing audio, visual and manipulative media as well--and these include tapes, records, games, simulations, realia kits, maps, picture cards, filmstrips, film loops, slide sets and similar materials. Materials are needed in all areas of social studies that can be used by students who dislike to or can't read at grade level just as are materials that involve non-verbal interaction.

Second, materials development must be viewed as more than creating new student materials. In many instances there already is an abundance of instructional material in existence. What is lacking and what is much needed are detailed directions describing how a variety of these existing student materials may be woven together into useful teaching strategies. Teacher materials are needed--including descriptive lists of available instructional materials and teaching guides suggesting day-by-day strategies

for using them in a variety of learning experiences. If teachers knew how to use existing materials to accomplish a variety of objectives, classroom instruction could be greatly improved throughout the social studies. Developing such "how to" guides is a relatively untapped but much needed area of instructional materials development.

4. Devote considerably more attention to elementary school social studies: What happens to students in elementary school shapes not only what they learn in the secondary grades but also what they should and can learn. Project Africa research found, for instance, that erroneous stereotypes of Africa did exist in the minds of elementary school graduates and that what they studied about Africa in the elementary grades may have contributed significanly to the formation of these misimpressions. Having such stereotypes sharply conditions what students are willing and able to learn in later studies--students who "know" from very brief elementary school studies of pygmies and Tutsi that "all" Africans are black, either very short or very tall, and mostly naked find it difficult if not impossible altogether to acknowledge the existence of other, less exotic facets of African life even when they study them in detail in later grades. This is undoubtedly true for other regional studies, world history, American history and other social studies topics as well.

Unless projects to improve instruction at the secondary level are also directed toward improving the basis for that instruction provided in the elementary grades, social studies instruction in the secondary school may well have to concentrate almost completely on combating erroneous stereotypes and unlearning misinformation instead of helping students broaden their horizons and explore new areas of learning. Unless the skills and concepts needed to engage profitably in social studies learning in the secondary grades are developed deliberately and in a well structured pattern in the elementary grades, what can be done at the secondary level will remain decidedly limited. Since most elementary teachers are not well acquainted with history or any of the other social sciences, they need teaching guides and other well-constructed materials to make what they are doing useful to their students. Con-

siderable attention to elementary school social studies curriculum improvement is needed, and projects structured like Project Africa may provide a vehicle for just such undertakings.

5. Be a cooperative effort of scholars, experienced classroom teachers, media specialists, specialists in curriculum and instruction and students. Worthwhile improvement of classroom teaching about any subject cannot be launched by one narrowly conceived group. A wide range of expertise and backgrounds are needed. Securing this expertise is much more difficult than it first appears, however. Too many university professors, expert as they may be in their subject, don't really know what teaching and learning are all about--especially in our elementary and secondary schools. Too many classroom teachers don't either. Moreover, there are very few classroom teachers who can create and prepare good instructional materials. Identifying a qualified and balanced staff is a major prerequisite for any formal social studies curriculum improvement effort.

Students, too, ought to play a basic role in efforts to improve social studies instruction at all grade levels. They can help identify subjects of study relevant to their interests, teaching techniques that "turn them on"--and off, and materials they find interesting and useful. They are good evaluators of teaching strategies and are very capable of candid but constructive suggestions on how to improve teaching. Some are even talented creators and producers of materials themselves.

6. Be related in a positive way to teacher-training. Teaching about any subject is a difficult task. Few teachers have the experience or training requisite for effective teaching about all that they are required to teach in their social studies classes. A well-rounded effort to improve instruction in any social studies subject requires some attention to pre-service and in-service training of teachers. This training should require considerable study of inquiry teaching strategies, some study in the content involved--and especially ways in which the content is related to student needs, interests, and aspirations, and practice in teaching the content. Especially significant here is study and practice of techniques and strategies of inquiry-

teaching, for if a teacher can master the intricacies of this teaching style, then he can teach any social studies content with confidence and excellent results.

Above all, however, teachers need training in materials--not necessarily designing them because too few teachers seem to have the time or talent or resources to do so, but in selecting and using them. Probably the best training any teacher can receive in teaching about any body of content in the social studies is that which helps him become familiar with the wide range of existing materials--how to locate, select and evaluate them; which gives him practice in weaving available materials into worthwhile lessons; and which gives him practice in using these lessons in actual teaching situations. Pre-service teacher training in social studies ought to emphasize not how to make materials so much as how to find and use well what materials already exist. This requires a very explicit rationale for teaching and a thorough understanding of what good teaching is in the first place.

7. <u>Establish some type of on-going implementation program</u>. Curriculum research and development projects are useless unless the products of their research are widely disseminated and implemented in the classrooms of our schools. Every curriculum improvement effort, if it has any hopes at all of making any significant improvements in teaching must therefore communicate its findings to teachers and local administrators and help these educators engineer these findings into their own local curricula.

There are a number of ways this dissemination and implementation may be undertaken. Project Africa, for instance, employed a variety of methods for disseminating the products of its research. But there are other ways, too. One of these is the avenue of commerically published versions of project materials--an avenue that in general provides project materials to classroom teachers quicker, cheaper and in more readily useful form than can the ERIC document reproduction service, the government printing office or even the project itself.

Another avenue for dissemination and implementation is specially funded education centers specializing in

introducing new programs and materials in local schools. Worthwhile curriculum development projects ought either to be affiliated with such centers from their inception or should be reconstituted as such implementation centers upon the completion of their research and development responsibilities. Thus, could be established specific sources of help for teachers or schools desirous of using the products of a particular curriculum improvement effort--the kinds of help that could be embodied in (1) some type of periodical newsletter designed to keep teachers abreast of the latest happenings in the subject field; (2) consultant services of scholars and teaching specialists; (3) a resource center containing up-to-date samples of all audio, visual, graphic and written materials on the subject for examination by interested teachers; (4) a continually up-dated descriptive bibliography of all commercially prepared materials that might be useful in classroom learning about a particular subject; and most importantly (5) some type of organization, complete with necessary staff, materials and funds, to assist and train teachers in actually initiating in their classrooms use of the new instructional materials or programs developed by the project.

There appears to be at present a large gap between curriculum research and implementation. It needs desperately to be closed.

8. Have sufficient funds to accomplish its prescribed objectives: As noted above curriculum research and development is not the same as more traditional educational research. It is creative and open-ended. Specific use of resources cannot always be determined in advance with accuracy. Funds must be available to enable any such project to follow where its research leads it. Until this is possible curriculum improvement will always be limited and less than ideal--indeed, even at times less than desirable.

Any worthwhile effort to improve teaching about social studies in our secondary schools must of necessity be a rather lenghty and costly undertaking. Eventhough there are many directions in which a curriculum improvement project could legitimately move, a highly selective effort is much more likely to succeed than is a scatter-gun type of project. Project Africa has been rather limited in its work and because of this, it seems to us, it has been at least

moderately successful in achieveing its major objectives. Perhaps the structure and activities of Project Africa thus do hold some most useful implications for similar undertakings.

Summary

Project Africa did accomplish almost all of the objectives set for it by its authors and sponsors. Some of these were not as thoroughly done as we would have liked, however, for a variety of reasons. Chief among these reasons were those relating to funds and staffing. Nevertheless, the work of this Project appears to have certain implications for future social studies curriculum research and development, in general, and for similar research on various other culture areas in particular. Some of the more significant of these have been mentioned here.

There is, in Africa south of the Sahara, a tale that has been told by the Hausa for hundreds of years and recently recorded by Anthony Kirk-Greene:

> Two frogs fell into a calabash of milk. They could not get out. After a while one of them became exhausted and cried out, "My time has come." He stopped trying, sank to the bottom of the calabash and was drowned.
>
> The other frog kept on trying. His movements caused the milk to curdle into butter and to form a solid ball. Then he climbed on to the ball of butter, jumped out of the calabash and escaped with his life.

This tale aptly characterisizes Project Africa. In some ways the project did get trapped in a job seemingly too big for its staff and resources--in some ways it may even have appeared to flounder. Yet, in most respects, through the sheer effort and imagination of many people, all motivated by a sincere desire to improve teaching and learning in our schools about Africa south of the Sahara, a variety of materials useful in improving classroom instruction were developed.

The staff, consultants, cooperating teachers and other contributors involved in Project Africa have, indeed, produced a number of materials, some or all of which may be useful in improving teaching about Africa south of the Sahara in selected grades in American secondary schools. Whether or not these materials actually will have any significant, constructive impact on our classrooms, however, is yet unanswered, for it has been beyond the scope of this project to implement the products of its research. Doing this remains the responsibility of local teachers and administrators.

Project Africa was, of course, a first step toward improved teaching about Africa for without the products of its research--its materials, teaching guides, research reports, evaluation data and in-service workshops model--there would be very little to implement. Yet this task of implementation does remain. The final appraisal of Project Africa thus waits on the actions of those in whose hands lie the responsibilities for and power to make this research classroom realities.

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APPENDIX B

PROJECT AFRICA REPORTS AND PAPERS

Africa South of the Sahara: A Resource Guide for Secondary School Teachers. (1968) 210 pp. (ED 023-692) Paper $10.95 microfiche $1.00

A summary of project surveys of American students' knowledge about Africa and of what selected scholars and educationists recommend be taught about this region. Also includes guidelines for teaching. Contains annotated listing of 500 commercially prepared audio, written and visual materials on Africa south of the Sahara in existance as of Summer 1968.

New Instructional Materials on Africa south of the Sahara - (1969-70 Supplement to Africa South of the Sahara: A Resource Guide for Secondary School Teachers. (1970) 48 pp.

Contains a descriptive list of over 200 commercially prepared instructional materials on Africa south of the Sahara published between summer 1968 and April 1970.

Images of Africa: A Report on What American Secondary School Students Know and Believe About Africa South of the Sahara (1968) 36 pp. (ED 023-693) Paper $2.10 microfiche $1.00

Complete technical report of a nationwide survey of how 3259 American 7th and 12th graders perceive Africa south of the Sahara; includes survey data and analysis as well as a discussion of the implications of these findings for classroom teaching.

Africa South of the Sahara: An Objective Test for Secondary Schools and World Regions Perception Survey (1969) (ED 030-010) Paper $0.90 microfiche $0.25

Contains copies of the two instruments used in the nationwide student survey as well as answer key and directions for administration.

Evaluation of Africa South of the Sahara: An Inquiry Program for Grades 7-10 (1970) 130 pp.

Complete technical report of the final evaluations of the project's 7-10th grade program of study; including presentations and analysis of the scholars' evaluation of the materials, teacher and student evaluations of the program and pre-and post-test evaluations.

Copies of these reports are available at the prices indicated directly from:

ERIC Document Reproduction Service
The National Cash Register Company
4936 Fairmont Avenue
Bethesda, Maryland 20014

APPENDIX C

INSTRUCTIONAL MATERIALS DEVELOPED BY PROJECT AFRICA

MATERIALS COMPRISING AFRICA SOUTH OF THE SAHARA: AN INQUIRY PROGRAM FOR GRADES 7-10:

Africa South of the Sahara: Rationale and Introduction (teaching guide and student materials) 1969 (ED 032-324) microfiche $0.50 paper $3.45.

Peoples of Africa - Topic I (teaching guide and student materials) 1969 (ED 032-325) microfiche $1.00

History of Africa - Topic II (teaching guide and student materials) 1969 (ED 032-326) microfiche $1.00

Changing Africa - Topic III (teaching guide and student materials) 1969 (ED 032-327) microfiche $0.50

RESOURCE UNITS FOR 12th GRADE:

Traditional African Religion (selected resources and model unit with teaching guide and student materials) 1970 (ED 037-586) paper $3.75 microfiche $0.50

Urbanization in Africa (selected resources and model unit with teaching guide and student materials) 1970

Africa - A Data Book (country-by-country descriptions, statistical, economic, political, social, demographic data) 1970

OTHER INSTRUCTIONAL MATERIALS:

Geography of Africa (176-frame, self-testing program, test, maps) 1969 (ED 033-249) paper $9.65 microfiche $0.75

Copies of these materials are available at the prices indicated directly from:

ERIC Document Reproduction Service
The National Cash Register Company
4936 Fairmont Avenue
Bethesda, Maryland 20014

APPENDIX D

SCHOOLS AND SCHOOL SYSTEMS COOPERATING WITH PROJECT AFRICA

EAST

Abraham Lincoln High School
Rowland and Ryan Avenues
Philadelphia, Pennsylvania

Averill Park High School
Averill Park,
New York

East Seneca Jr. High School
1445 Center Road
West Seneca, New York

F.D.R. High School
5800 20th Avenue
Brooklyn, New York

Hamburg Central Schools
Hamburg,
New York

Kenwood Senior High School
Stemmers Run Rd. & Maryland Ave.
Baltimore, Maryland

Lebanon Jr. High School
Bank Street
Lebanon, New Hampshire

Lefferts Jr. High School
400 Empire Blvd.
Brooklyn, New York

Mt. Lebanon High School
Cochran Road
Pittsburgh, Pennsylvania

Oxford Hills High School
South Paris,
Maine

Peters Township High School
264 E. McMurray Road
McMurray, Pennsylvania

Pittsburgh Public Schools
Pittsburgh,
Pennsylvania

Plainview-Old Bethpage Jr. High School
Stratford & Bedford Roads
Plainview, New York

Riverside Jr. High School
Riverside Park
Springfield, Vermont

Uxbridge High School
Uxbridge,
Massachusetts

SOUTH

Charlotte-Mechlenberg Schools
Charlotte,
North Carolina

David T. Howard High School
551 Houston Street N.E.
Atlanta, Georgia

Hand Jr. High School
Woodrow & Wheat Streets
Columbia, South Carolina

Jefferson High School
4700 Alameda Avenue
El Paso, Texas

League Jr. High School
Twin Lake Road
Greenville, South Carolina

Miami Northwestern High School
7007 N.W. 12th Avenue
Miami, Florida

Muscogee County School District
318 Eleventh Street
Columbus, Georgia

Oglethorpe Elementary School
601 Beckwith Street S.W.
Atlanta, Georgia

Roswell Senior High School
Roswell,
Georgia

San Angelo Public Schools
244 North Magdalen Street
San Angelo, Texas

MIDWEST

Belvidere Jr. High School
5th & Allen Streets
Belvidere, Illinois

George Washington High School
2205 Forest Drive, S.E.
Cedar Rapids, Iowa

Grand Rapids Christian High Sch.
415 Franklin Street, S.E.
Grand Rapids, Michigan

Green Bay Public Schools
Green Bay,
Wisconsin

Knoxville City Schools
101 East Fifth Avenue
Knoxville, Tennessee

Lexington Junior High School
Lexington,
Nebraska

Louisville Diocesan Schools
Louisville,
Kentucky

Louisville Public Schools
Louisville,
Kentucky

Main High School
Rapid City,
South Dakota

Marion Local Schools
Maria Stein,
Ohio

Newton D. Baker Jr. High School
3690 West 159th Street
Cleveland, Ohio

Nolan Jr. High School
1150 East Lantz
Detroit, Michigan

Ohio County Schools
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South High School
733 33rd Street, South
Wichita, Kansas

South View Jr. High School
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Edina, Minnesota

St. Joseph Jr. High School
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Valley Forge High School
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Parma Heights, Ohio

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PUBLICATIONS BY PROJECT STAFF
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1. E. Perry Hicks and Barry K. Beyer, "Images of Africa," Journal of Negro Education. 39:2, 158-166 (Spring 1970).

2. Barry K. Beyer, "The Big Pitch, Or Selecting Materials On Africa Can Be Sticky," Media and Methods - Exploration In Education. April, 1970, 45-47, 66-70.

3. Barry K. Beyer, Africa South of the Sahara: A Resource and Curriculum Guide. New York: Thomas Y. Crowell Company, Inc. 1969. 138 pp.

4. Barry K. Beyer, "Best Informed Also Most Misinformed About Africa," Phi Delta Kappan. April 1969, 490-491.

5. Barry K. Beyer, "Media Guide to Africa," Media and Methods - Exploration in Education, March 1969, 36-40.

6. E. Perry Hicks and Barry K. Beyer, "Images of Africa," Social Education. 32:8, 779-784, (December 1968).

7. E. Perry Hicks, "Inductive Teaching and the Overhead Projector," Teachers Guide to Media and Methods. 4:9, pp. 34-36 (May 1968)

8. Barry K. Beyer, "Uncovering Africa In The Secondary School," Social Education. 32:5, 440-444, (May, 1968).

9. Barry K. Beyer, "Teaching About Africa South of the Sahara In American Secondary Schools - A Survey and A Challenge," African Studies Bulletin. April, 1968, pp. 18-32.